

THE FEBRUARY 1934

# RADIO INDEX

THE ALL-WAVE RADIO MAGAZINE



25<sup>c</sup>

30 cents  
in Canada  
Including  
Tax

The Short Wave Stations of North America  
The Long Wave Stations of the World  
Broadcast Reallocation in Europe  
The Beginner's Story of Radio  
"What's Wrong with My Set?"

No. 76

# FEBRUARY DX CALENDAR

In addition to the following programs which are put on by courtesy of the stations for the benefit of distant listeners, more than 300 other stations are holding monthly frequency checks for monitoring by the Federal Radio Commission. These monthly checks appeared in the September issue by days of the week, in November by frequencies, and in December by states and cities. The following programs are arranged in order by Eastern Standard Time. Power is given in parenthesis in kilowatts. Distant readers should note that those programs which occur weekly, will probably be repeated on the same day of the week in March.

## SUNDAY MORNINGS

Jan. 28

2:00-3:00—CHWC, Regina, 1010 (.5)  
4:30-5:00—CKFC, Vancouver, 1410 (.05)  
6:00-7:00—XGOA, Nanking, 660 (.75)

Feb. 4

1:00-2:00—WWAE, Hammond, 1200 (.1)  
2:30-4:30—CKBI, Prince Albert, 1210 (.1)  
3:00-6:00—WGCM, Gulfport, 1210 (.25)

Feb. 4-18

5:00-6:00—XFB, Jalapa, 1290 (1)

Feb. 4-25

3:00-5:00—CMCU, Havana, 1100 (.5)

Feb. 11

1:00-1:30—WKY, Oklahoma City, 900 (1)  
1:00-2:00—KUSD, Vermillion, 890 (.5)  
3:00-4:00—WOS, Jefferson City, 630 (.5)  
3:00-4:30—KFOX, Long Beach, 1250 (1)  
3:30-4:30—CKWX, Vancouver, 1010 (.1)  
4:00-5:00—WBBZ, Ponca City, 1200 (.1)  
5:00-6:00—WGLD, Janesville, 1200 (.1)

Feb. 11-25

4:00-5:00—CMGF, Matanzas, 971 (.1)

Feb. 11-18-25

1:00-3:30—WIBM, Jackson, 1370 (.1)

Feb. 18

2:00-3:00—KOH, Reno, 1380 (.5)  
3:00-4:00—KREG, Santa Ana, 1500 (.1)  
KUMA, Yuma, 1420 (.1)  
3:00-5:00—KGNO, Dodge City, 1340 (.25)  
3:00-5:00—KMJ, Fresno, 580 (.5)  
3:00-7:00—KGIH, Butte, 1360 (.5)

Feb. 25

12:00-4:00—KFSG, Los Angeles, 1120 (.5)  
1:00-2:00—XEPW, Tampico, 1280 (.07)  
3:00-5:00—WHAZ, Troy, 1300 (.5)  
4:00-5:00—WIBG, Glenside, 970 (.1)

Feb. 4-11-18-25

12:00-1:00—CMBW, Havana, 1140 (.6)  
CMX, Havana, 875 (1)  
XETW, Mexico City, 830 (.5)

12:00-1:30—WMBG, Detroit, 1420 (1)

12:00-3:00—CMCD, Havana, 915 (.5)

WGES, Chicago, 1360 (.5)

1:00-2:00—WCCO, Minneapolis, 810 (.50)

WDOD, Chattanooga, 1280 (1)

1:00-2:30—XEAB, Tamaulipas, 1450 (.0075)

1:00-4:00—CMBD, Havana, 965 (.25)

2:00-3:00—WMMN, Fairmont, 890 (.25)

2:00-5:00—KPJM, Prescott, 1500 (1)

3:00-4:00—KFXM, San Bernardino, 1210 (.1)

KGER, Long Beach, 1360 (1)

3:00-5:00—CJAT, Trail, 1200 (.05)

CKOV, Kelowna, 1200 (.05)

KVL, Seattle, 1370 (1)

3:00-6:00—XEOK, Tijuana, 757 (5)

4:00-5:00—CFJC, Kamloops, 1120 (1)

CMJK, Camaguey, 790 (5)

4:00-6:00—XEFV, Juarez, 1370 (1)

\*P. O. Box 1441, San Diego, Calif.

## MONDAY MORNINGS

Jan. 29

6:00-7:00—XGOA, Nanking, 660 (.75)

Feb. 5

3:00-5:00—KPCB, Seattle, 650 (1)

3:45-4:00—RUJ, Walla Walla, 1370 (1)

Feb. 19

2:30-3:30—HIH, San Pedro de M., 1395 (.015)

3:30-4:30—\*WHBU, Anderson, 1210 (1)

\*Wants 5c for verification.

Feb. 5-12-19-26

12:00-3:00—WGES, Chicago, 1360 (.5)

12:30-1:00—KSOO, Sioux Falls, 1110 (2.5)

2:00-3:00—KFSG, Los Angeles, 1120 (.5)

## TUESDAY MORNINGS

Jan. 30

6:00-7:00—XGOA, Nanking, 660 (.75)

Feb. 6

5:00-5:30—WKFI, Greenville, 1210 (1)

Feb. 20

2:30-3:30—HJN, Bogota, 681 (.5)

Feb. 27

2:00-3:00—HIIZ, Santo Domingo, 1300 (.01)

Feb. 6-13-20-27

12:00-1:00—XEH, Monterrey, 1132 (.25)

1:00-1:30—WTOG, Savannah, 1260 (.5)

1:00-3:00—CMCW, Havana, 965 (.15)

1:00-4:00—WSUI, Iowa City, 880 (.5)

4:00-5:00—WCAH, Columbus, 1430 (.5)

5:00-6:00—WAWZ, Zarephath, 1350 (.25)

## WEDNESDAY MORNINGS

Feb. 7

1:00-2:30—KFYR, Bismarck, 550 (1)

4:30-5:00—WCAL, Northfield, 1250 (1)

Feb. 14

1:00-2:00—WIBG, Glenside, 970 (1)

Feb. 21

2:00-2:30—KWCR, Cedar Rapids, 1420 (.1)

3:00-3:30—KSO, Des Moines, 1370 (1)

3:00-7:00—WOPI, Bristol, 1500 (1)

5:00-5:30—WIAS, Ottumwa, 1310 (1)

Feb. 28

2:00-4:00—WNRA, Muscle Shoals, 1420 (1)

Feb. 7-14-21-28

6:00-7:00—WOOD, Grand Rapids, 1270 (.5)

## THURSDAY MORNINGS

Feb. 1

3:00-4:00—WRDW, Augusta, 1500 (1)

4:30-5:00—WCBS, Springfield, 1210 (1)

5:00-6:00—WRAW, Reading, 1310 (1)

Feb. 1-15

1:00-2:00—HIH, San Pedro de M., 1395 (.015)

Feb. 8

2:00-3:00—KWCR, Cedar Rapids, 1420 (1)

3:00-3:30—KSO, Des Moines, 1370 (1)

5:00-5:30—WIAS, Ottumwa, 1310 (1)

Feb. 15

3:00-4:00—WHBQ, Memphis, 1370 (1)

Feb. 22

2:00-3:00—WRUF, Gainesville, 830 (5)

4:00-5:00—WSPA, Spartanburg, 1420 (.25)

Feb. 1-8-15-22

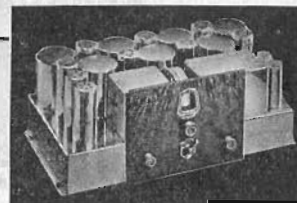
2:00-4:00—CMK, Havana, 730 (5)

2:00-4:00—WEDC, Chicago, 1210 (1)

(Continued on page 97)

A Radio **GUARANTEED**  
to give **WORLD-  
WIDE**

**RECEPTION** *Every Day!*

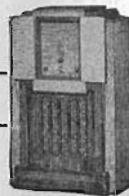


**THRILLS  
FOR  
EVEN  
HARDEST-  
BOILED  
D-X  
HOUNDS**

with

*The*  
**SCOTT  
ALL-WAVE  
Deluxe**

**15 to 550 METERS**



**CONSOLES**

Specialty designed cabinets—  
correct in furniture beauty  
and in scientific acoustic  
quality—are provided.

Don't envy the fellow with a big list of verifications—have a bigger collection yourself!

It's a cinch with the SCOTT ALL-WAVE Deluxe. Owners all over the face of the globe are proving it daily—and the SCOTT'S reputation as a star distance-getter has for years stood supreme.

No other radio set in the world ever hung up a record such as that of three SCOTT owners who, during a six-month period, received 3410 foreign verifications from 158 stations in more than 26 countries. During this same time, more than 200 other SCOTT owners reported reception of 15,847 other foreign programs from 320 stations in 46 foreign countries.

And distance—on the short waves alone—isn't everything. The SCOTT ALL-WAVE Deluxe provides just as remarkable performance on the regular broadcast band, with tone quality beyond compare.

On a recent voyage to Australia, for instance, Mr. Scott, using one of his ALL-WAVE Deluxe receivers, kept in constant touch with WBBM in Chicago, all the 10,000 miles to Australia and return.

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**E. H. SCOTT RADIO LABORATORIES, Inc.**  
4450 Ravenswood Ave., Dept. RX24, Chicago, Ill.

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4450 Ravenswood Ave., Dept. RX24, Chicago, Ill.  
Send me at once, without obligation, all particulars regarding the SCOTT ALL-WAVE Deluxe, and PROOFS of its ability.

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Address \_\_\_\_\_

Town \_\_\_\_\_ State \_\_\_\_\_



**HERE'S MY  
IRON-CLAD  
WARRANTY**

If, after 80 days trial in your home, you are not convinced that the SCOTT ALL-WAVE Deluxe has finer tone, greater sensitivity and selectivity, and brings in more foreign stations, more stations on the broadcast band and more stations on the short wave bands than any other receiver that may be compared with it, you can return it to us and have every cent you paid for it promptly refunded. In addition to this, every part (except tubes) is guaranteed for five years.

*E. H. Scott*  
President.

FEBRUARY 1, 1934



# RADIO INDEX

Reg. U. S. Patent Office

FRED CLAYTON BUTLER

Editor and Publisher



PAGE TAYLOR

Short Wave Editor

B. FRANCIS DASHIELL  
Technical Editor

TENTH YEAR

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On the "Bath Club" CBS Sundays 9 p. m.

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ADDRESS ALL CORRESPONDENCE TO CLEVELAND OFFICE

## The BEGINNERS'

## STORY of RADIO

PART FIVE

Tuning the Radio-Frequency Circuits

• • • By B. FRANCIS DASHIELL

WHILE studying the actions of condensers we made an interesting discovery. It was: When a condenser is set to a given capacity, it will permit an alternating current of a given frequency to pass through its circuit. Then, when the capacity is changed somewhat, another alternating current of a different frequency will flow. Therefore, because of this definite relationship between capacity and frequency, we can make use of the variable condenser to select any frequency of broadcast wave that may be desired. The selection of these certain frequencies, or radio waves, is performed only in the *radio-frequency circuit* by the act of *tuning*.

If the frequency of the broadcast wave or signal that is being received is high, a condenser of small capacity is used (a small portion of the variable condenser's total plate area); when the frequency is low, the capacity must be large (all of the variable condenser's plate area in use). For broadcast station reception, a variable condenser having a maximum capacity of .0005 microfarad (500 micro-microfarads) will permit all frequencies between 550,000 and 1,500,000 cycles (550 and 1,500 kilocycles) to pass through the circuit which it tunes.

Now we will return to the receiving set for a moment. If we adjust the dial that controls the tuning condenser, we will find that we have set the condenser to some given capacity (value unknown), and that it will then be in *tune* with some given frequency. At this setting the condenser offers little resistance to one partic-

ular electrical vibration coming down from the antenna yet to all other frequencies it presents an effective resistance. Tuning a receiver is a simple matter. Let us see how it works.

### Tuning a Receiver

The resistance a condenser offers to the "apparent" flow of electricity is called *capacitive reactance*. Now, when the condenser is tuned to a state of *minimum* reactance, a given frequency will flow easily through the circuit. A tuned radio circuit, therefore, permits the passage of just one



Hi, Skippy! In real life he is Franklin Adams, aged 12 years and a student in the seventh grade at grammar school. He finds time for football and baseball when off the air and is also intensely interested in the collection of stamps. On the CBS, Mondays to Fridays at 5:00 p. m.



a.c. frequency, and prevents the flow of unwanted frequencies. This tuning effect enables us to select any particular radio signal from the chaos of vibrating waves that exists in the air about us.

But the condenser alone is not the only instrument at our command for the control of electrical vibrations in our radio sets. A single coil of wire—an *inductance*—also offers considerable resistance to the flow of an alternating current. And, like the condenser, its resistance to an alternating current is also a reactance—*inductive reactance*. Let us take some fixed inductance: The higher the frequency of the current, the greater will be the reactance of the coil; the lower the frequency, the smaller the reactance. Also, like condensers, small coils pass high frequencies; and large coils pass the low frequencies. That is why short wave receivers use small radio-frequency coils, or inductances, and broadcast receivers use larger coils.

#### Purpose of the Coils

Tune in a station with a fixed inductance, and then change the number of turns of wire on the coil. Immediately we vary the amount of inductance or reactance the coil presents to the flow of the given frequency, and that station is tuned out. But a new station frequency is tuned in. We have, therefore, changed the reactance so that a new radio frequency will flow easily through the coil. The coil inductance has been tuned to a given wave length or broadcast frequency. In the early days of radio, coils were tuned by means of switches and sliders. Today, in modern radio, we tune the inductances simply by means of variable condensers.

A coiled conductor, wound into an inductance, can be tuned by a variable capacity "shunted" around the coil. Such a coil is a radio-frequency coil, transformer or inductance, for all tuning is confined to the radio-frequency portion of a radio circuit. The coil must be tuned in order to find

a point where one frequency will pass through without opposition. This condition is called *resonance*. We can create hundreds of these points of resonance as we slowly turn the tuning condenser shaft. We really balance the inductive reactance of the coil by connecting the capacity reactance in parallel around the radio-frequency coil. The circuit now offers minimum reactance, and at this resonant point the tuned-in radio frequency will flow at its maximum strength. Other signals will be tuned out.

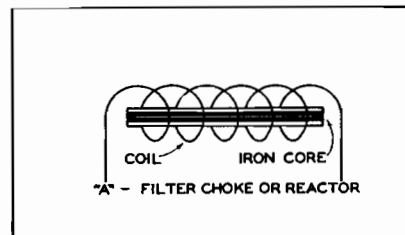
#### The "Why" of Tuning

What is inductive reactance? Why does it permit a single frequency of alternating current to be selected for passage through the circuit while all other frequencies, which also may be present, are choked back?

We have seen, in Part Two, that an alternating current will build up oscillating magnetic fields of force about a coil through which the current flows. This current alternates two times in every cycle, and so does the magnetic field. When the voltage drops from maximum potential at the peak of one alternation, as shown at "B," Part Two, there also is a failure of the surrounding magnetic field. There is a slight lag between the two; the magnetic lines of force collapse upon the turns of wire, and induce additional voltages in the coil, just when the next alternation of current is beginning to appear from the other direction. Thus, these two currents tend to oppose each other, and the secondary effect is called *reactance*, *counter-electromotive-force*, or *self-inductance*.

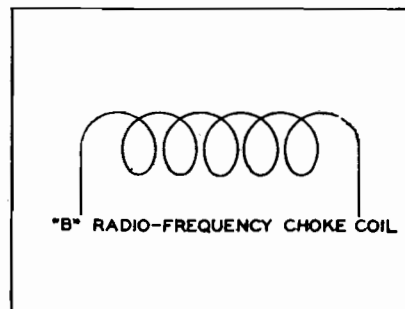
#### Impeding All But One Frequency

Self-inductance, then, tends to prevent the flow of alternating or pulsating currents through a coil of wire. However, there will be one certain frequency which will vibrate at the proper rate so that its self-induction and the original current will rise and fall between alternations at the proper moment. Both will be in step



or phase, and there will be no a.c. resistance, or self-induced reactance that will hinder the flow of the original current. Reactance is measured in ohms, and *impedance*, which is a certain combination of wire resistance, reactance and capacity, also is indicated in ohms.

The unit of self-inductance is called the *henry*. Smaller units are: the *millihenry*, which is one-thousandth part of a henry; and the *microhenry*, the millionth part of a henry. In a coil of considerable inductance—about 30 to 50 henries—which offers high reactance against the flow of most all alternating, pulsating, or rippling currents, the high reactance voltage developed will prevent potential changes in the current. This type of coil is called a *choke*, *reactor*, or *filter*, and the symbol used to indicate it in radio diagrams is shown at "A." Such coils have heavy iron cores with many turns of wire. The filtering effect is obtained because of the tendency of the inductance to smooth out all pulsations and ripples in the rectified current so the result-

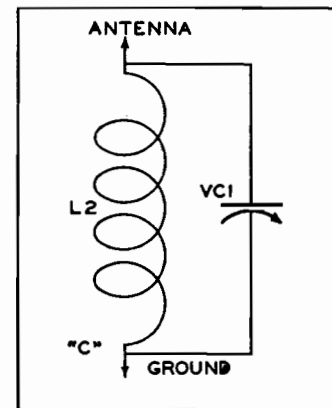


ing direct current will flow with a steady value. But we will hear more about chokes and filters when we discuss the power units of radio sets.

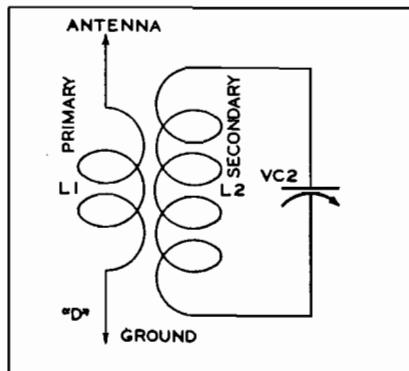
#### The Primary Circuit

Smaller inductances used in radio circuits, are known as *radio-frequency chokes*. The circuit diagram symbol is shown at "B." They are wound on open tubes, and have values ranging from .05 henry (50 millihenries), down to .0005 henry (500 microhenries). These tiny coils choke back the faster radio frequencies, but permit the passage of the slower audio-frequency currents.

When we tune a radio circuit we simply turn a dial and adjust the capacity of one or more variable condensers. By so doing we bring the tuning inductance and the capacitance in resonance. The high reactance of the coil is balanced by the low reactance of the condenser when tuned to some given radio frequency. Such a tuning arrangement is shown in "C."



The variable condenser VC1 is connected across the ends of the coil L2. A change of VC1 will balance its capacity against the inductive reactance of L2 (which always is a fixed value), and change the total reactance so as to tune in some other radio frequency. Any slight movement of



the condenser rotor plates will change this state of balance to another point of resonance. Each change, then, tunes in some new signal.

### The Secondary Circuit

Connect a small, second coil (L1) between the antenna and ground, and couple it inductively to the inductance L2, which is tuned by the condenser VC1. We now obtain the scheme shown at "D." The small coil—about ten turns—becomes the primary; the larger coil—about 70 turns—becomes the secondary. Both, so arranged, make a radio-frequency transformer (see illustrations "G" and "H" in Part Three of this series). By tuning the secondary of this transformer we provide an *elementary radio-frequency circuit*. Only the radio-frequency circuits of a receiver are tuned to select broadcasting stations. It is here that the *selectivity* of the set is determined, and where *radio-frequency amplification* of the weak, original signals from the antenna is accomplished by the transformer action of the r.f. inductances or coils.

Hundreds of weak electrical vibrations are being constantly induced in the radio antenna by every passing radio wave. The broadcast wave, from the transmitting station, is a swinging, vibrating magnetic field. As it cuts past any metallic conductor within its range, it induces a slight current of electricity in the conductor.

This action is similar to that described in Part Three, illustrations "D" and "E." If it were not possible for us to tune our sets, all of these induced waves would pass through in a bedlam of interference. That is why, when a receiver is not selective and has poor tuning and resonance, there is much station interference.

### The T. R. F. Circuit

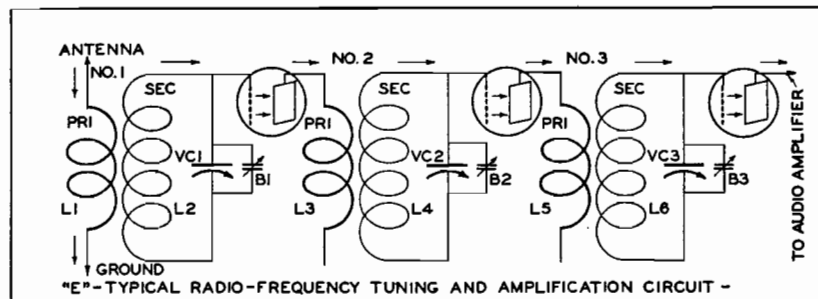
In the diagram "D," which now makes use of the radio circuit symbols shown in Part Three and Part Four, we see the primary coil L1. It permits most of the radio waves to pass down to earth because its reactance is very low; it is an *untuned* circuit. The currents passing through L1 will induce stronger currents in the secondary L2. But the inductance value of L2 is higher and, therefore, only those frequencies falling within its resonant limits—the broadcast band—will be reproduced.

It is necessary to tune out all of those frequencies induced in L2, within its resonant limits, for we wish to retain but a single wave for further amplification. This selection can be accomplished by varying the capacity reactance of the condenser VC1. The tuned signal, in this case, is stronger than the one selected by the arrangement shown in "C," for we have had the benefit of transformer action, or radio-frequency amplification.

### Building Up the Signal

We can add a second radio-frequency unit, similar in all details to the first, shown at "D," and thus provide two *stages* of radio-frequency transformers and tuning. At "E" these two stages are seen. The tuned, and amplified, signal, from the coil L2, is passed to the primary coil L3 of the second r.f. transformer. It induces stronger amplification in the secondary coil, L4, which is tuned anew by the condenser, VC2.

And we can add still another unit, and there will be *three* stages of r.f. amplification and tuning, as shown completely at "E." The strong, and



now sharply tuned signal, from L4, is passed to the primary L5 of r.f. transformer No. 3. Here, it induces, in the secondary coil L6, which is tuned by VC3, a very powerful current having the modulated carrier-wave characteristics shown at "E" in Part Two. The three stages of induction, amplification and tuning, provide a sharply resonant circuit extending from L1 to L6, for one frequency only. A change of VC1 will require changes in VC2 and VC3 so as to make all three radio-frequency stages again resonant at some particular radio frequency coming from the antenna. If the coils L2, L4 and L6 are identical, and the condensers VC1, VC2 and VC3 similar, the tuning can be accomplished by placing the rotor plates of the condensers on a single shaft and turning them simultaneously with one dial. Slight variations in VC1, VC2 and VC3, can be balanced by the tiny balancing condensers B1, B2 and B3. A radio-frequency circuit, sharply tuned and balanced, will pass but one frequency at a time. The signal is increased in intensity, or *amplitude*, and is ready to be sent to the detector and thence into the audio-frequency circuit for further amplification before it will operate the loud speaker.

(Since the reader already has been introduced to the mysterious electron, in Part Four, it will be appropriate to take him, next month, on a journey through the maze of screens, grids, plates, cathodes and filaments of our radio tubes.)

### Queries

1. In what two ways may one particular wave be picked out of the hundreds in the air?
2. What is the effect of adding turns of wire to a tuning coil?
3. What is the effect of meshing more plate area in a condenser?
4. How is the condenser connected to a coil for tuning?
5. How is a radio signal amplified?
6. When coil and condenser are in tune to some particular wave, what is it termed?
7. What is the unit of inductance? Of reactance? Of impedance?
8. If you were to attach phones to the r. f. circuit, what would you hear? Why?
9. How does a tuning coil differ from a choke coil?
10. Explain why, given a certain inductance and a certain capacitance, only one frequency of radio wave is permitted to pass.

*Those Radio Program "Slates" fill a long-felt want. Made of heavy, coated card stock, entries may be made and erased as your favorites change. Spaces are provided for every 15-minute period of each evening of the week and for Sunday afternoon.*

*Make up your own slate of programs and avoid missing those things you particularly wanted to hear. Price 10c each, two for 15c, four for 25c post-paid.*

# Little Life Stories of RADIO FOLK

• • • by "BETTY"

**W**ENDELL HALL, Red Headed Music Maker of radio's early days, was born in St. George, Kansas, in 1896. Except for a few years in Florida, Chicago has been Hall's home since he was three years old, and he and Mrs. Hall and the two little Halls, Wendell Woods, Jr., and Lowell Martin, now reside in Wilmette, a residential suburb on the north shore.

Wendell attended grade and high schools in Chicago, but he evinced a remarkable musical talent from the first and his parents wisely encouraged him. He sang in church choirs, quartets or wherever else he could find the opportunity until he reached the age of eighteen, whereupon he decided to take up orchestral music and proceeded to master, in turn, the clarinet, saxophone, trombone, zylophone and later the ukulele. He went on the vaudeville stage as the "Singing Xylophonist" in 1917, but the war came along and he headed for France with the Fifth Aircraft Machine Gun Corps.

After the war, Wendell came back and resumed his vaudeville tour. But a new medium of entertainment was springing up, radio. Wise enough to see its possibilities early, the young singer in 1921 trekked over to KYW, the first radio station in Chicago, and offered his services.

## He Started the Thing

He was put on, singing his own songs, first without pay, and later for \$25 a week. It was while singing at KYW that Wendell composed and first sang his most popular hit, "It Ain't Gonna No More." The response was immediate, and from that time on he was "made."

Later, on his own initiative and backing, he made a nation-wide tour of thirty-five radio stations. In 1924 he married "the little girl in Chi-

cago," whom he had wooed over radio, in a radio wedding. They were married, at the demand of millions of radio listeners, in the studio of WEA, with WCAP, WJAR, and WGN plugged in, the first network ever arranged for a private citizen. The bride was Miss Marion Martin, an employe of the reference department of the Chicago Tribune.

Wendell had the first national radio advertising contract, traveling from station to station as the "Eveready entertainer." If there is one characteristic predominant in Wendell it is originality. He turned up with fifty brand new songs when he went on the Fitch program, and he wrote both words and music for every one of them. Other singers have one voice, but Wendell sings in three, and yet it is not these novelties which have made him so universally popular. It is his personality.



The Red-Headed Music Maker

## A Story of Three Jacques

Two hundred and seventy-five pounds of flesh ought to make a heavyweight, but in the case of Jacques Renard it composes a musician, not a prize-fighter. This mighty maestro is heard over the Columbia network on bi-weekly programs with Col. Stoopnagle and Budd and the Sunday broadcasts of "Songs Your Mother Used to Sing."

There was a time when Jacques Renard was mistaken for a boxer. It was at Hot Springs, Ark., and a French heavyweight by the name of Jacques Renault was staying at the same hotel. By mistake the orchestra leader received and opened the fighter's mail. Renard immediately went to work and melted away sixty-four pounds, just to make sure there wouldn't be any more embarrassing cases of mistaken identity.

Several other facts about the portly Jacques, however, are of more importance than these weighty matters. Just when he was learning to play on the floors of his parents' home in Kiev, Russia, Jacques and the family moved to Boston. Shortly thereafter Jacques was able to hold a violin in his chubby hands and his father saw to it, with the aid of a flogging when necessary, that the lad practised and became proficient with the instrument in case visitors arrived who wanted to be entertained. Young Jacques not only got his musical start through the urgings of his father, but also learned to speak Italian fluently because of his parent's business. Father Renard, a former Cossack in the Imperial Army, had become an importer of Italian foods and Jacques had to help handle the foreign-speaking customers.

Between attending school and aiding the family's commercial enterprises, Jacques studied music with Jacques Hoffman. This early training created that desire to reach greater heights which Renard believes is largely responsible for shaping his career.

At the age of sixteen Renard



Monsieur Jacques Renard

toured South America as a violinist for the famous dancer Pavlova. Later he accepted the baton of a Boston dance orchestra. The new position was so interesting that he was inspired to form his own orchestra and open his own clubs, the Mayfair and the Cocoanut Grove.

Renard is married and the father of four children. The family lives happily in Forest Hills, occupying a penthouse in New York when they come to town for a change from suburban life.

## Strolling About Radio Row

B. A. Rolfe, the maestro, is known as the merriest man in radio, and Julius Tannen the saddest.

Frank Black, the NBC general musical director, has the largest and strongest hands, and Victor Young, the composer-maestro, the smallest hands.

Lee Wiley is given credit for being the radio star with the most chic; Jane Froman with being the loveliest lark in radio; Gertrude Niesen with being the most alluring; Connie Boswell with being the girl who waged the greatest fight against odds; Ethel Waters with being the greatest female stylist among the singers; and



Rosaline Greene with being the best actress in radio.

George Beatty is credited with being the stage star to make the greatest overnight hit in radio since Ed Wynn's debut; Albert Spalding with being the "high brow" who became a "regular fellow" with the musicians; Bert Lahr with being a comedian utterly without conceit; The Men About Town with being the slickest handlers of comedy lyrics; and the Revelers with being the most adept male quartet in history as well as radio; Rudy Vallee with being the celeb who has stood at the top longest despite scores of efforts to dethrone him; Johnny Marvin, the lonesome singer, with having the sweetest disposition; Frank Luther with having the most friends; Eddie and Ralph "Sisters of the Skillet" with being the safest bet a sponsor can pick when he needs immediate response; Will Rogers with being the one fellow nobody—even a sponsor—can guess what he will say next; and Edwin C. Hill with being the most forceful speaker.

#### How They Got Their Start

Columbia has just taken a census to discover what musical instrument is most popular among the maestros themselves, and discovers that in most cases the orchestra leaders mastered the piano, fiddle or saxophone before they took up the baton.

Among the ranks of pianists are Jack Denny, Little Jack Little, Eddie Duchin, Vincent Lopez, Claude Hopkins, Isham Jones, Joe Hynes, Freddie Rich, Lennie Hayton, Don Voorhees, Nat Shilkret, and Willard Robison, who also sings. Jones also is famous on the sax.

The most retiring member of the fiddle section is Guy Lombardo, who holds one in his left arm as a "prop," but has never played it since he took lessons as a boy in London, Ontario. However, Mark Warnow, Erno Rapee, George Hall, Enoch Light, Vincent Sorey and Leon Belasco still make the strings hum.

The saxophone contingent has distinguished members in Glen Gray, Wayne King, and Carmen Lombardo, Guy's assistant and member of the sax trio of Royal Canadians.

Frank LaMarr makes a bid for originality as a xylophone manipulator, Freddy Martin and Abe Lyman turn to the drums, Louis Panico whoops it up on a trumpet, and Fess Williams the clarinet.

#### A Song-Writing Taxi Driver

Here's a thumbnail sketch of Abe Lyman who completes with Glen Gray as tall man of the New York Maestros and who is so broad-shouldered he threatens to burst out of his tuxedo. Abe drove the first yellow taxi to appear on the streets of his home town, Chicago . . . played drums from childhood . . . abandoned the steering wheel of his taxi to thrash out syncopation in the Windy City's movie houses for \$5.00 a week . . . always got fired . . . Abe didn't like to be bossed and solved the problem by becoming boss himself . . . Organized a band for the Ship Cafe, Venice, Calif., and his music attracted the film stars of that time—Norma and Constance Talmadge, Thomas Meighan, Gloria Swanson, Charles Ray and Bebe Daniels . . . added four men to his 5-piece band and moved into the Coconut Grove at the Ambassador Hotel in Los Angeles where he made his fame and fortune . . . since then he's played the high spots of this continent and Europe . . . has written song hits—"Mary Lou," "Mandalay," "What Can I Say, Dear, After I Say I'm Sorry?" . . . Abe once loaned \$20 to a good-looking young foreigner who had been attempting to break into pictures . . . he was the late Rudolph Valentino.

\* \* \*

Lee Wiley, the songstress, has been worried for some time for fear that the melancholy note that inevitably creeps into her singing would not be entertaining to the lis-

(Continued on page 48)

## The EDITOR and the FAMILY

### A Happy New Year

TO those hundreds of readers who sent us Christmas and New Year greetings and good wishes, we give our thanks. We are sorry we cannot reply to each one in kind personally but that being quite impossible, we take this opportunity to make a most fervent wish—that 1934 may be what it now promises to be, the threshold of a new prosperity and a new happiness. The weary months through which we all have passed, like a cold and gloomy night, will only serve to make the sun more welcome and make us more deeply appreciative and worthy of our blessings.

Our hearts have been touched many times in the months gone by, with letters from our readers who frankly confessed to the hardships they were undergoing and who were yet making real sacrifices to continue their subscriptions to our magazine. One, we recall, wrote that he was sacrificing his lunch that day in order to use his lunch money for a new RADEX. Such loyalty and appreciation both humbles and exalts us.

That a new day is dawning we, at least, can no longer doubt. Our thanks go out to a great leader who dared to lead, who dared to take the offensive when weaker souls counseled caution and delay. The tide of battle has turned, the enemy is all but routed. It is at such a moment that loyalty and cooperation are needed. Let us follow our leader cheerfully and unquestioningly even into his mistakes and loyally depend upon him to lead us out of them again.

It is a matter of great satisfaction for us to mark the business improvement in our own small sphere. The month of October, 1933, was our best October since 1930. November was

the best since 1929. And December was the best month we ever had in our ten years' existence! So here's to 1934.

#### Confliction in Club Activities

"In the January issue, I noticed comment on the duplication of DX programs because numerous clubs arrange them ignorant of the plans of contemporaries," comments Clement Van Velsor, 1033 Sanford Ave., Irvington, N. J. "The NNRC with over 2000 members, arranges a DX program for a Sunday morning, for instance, and then a club with five or ten members arranges with another station on the same wave and about the same time. This confusion of programs is very detrimental. The NNRC has about 26 stations announc-



May we present "Happy-am-I," the Elder Solomon Lightfoot Michaux, pastor of the little church on the Potomac, who presents their unique services via WJSV and the CBS every Saturday from 7:30 to 8:00 p. m.

ing DX tips and some twelve newspapers publish them. As a result, thousands all over the country are listening for those programs and hear interference because a club with a dozen or so members has arranged a program for their benefit. It costs time and money to arrange these programs.

"Personally I think a club with a few members ought not to try to arrange programs. When it has grown to a fair size, it should cooperate with other organizations to eliminate confusion. The CDXR and the ARC are large clubs and their work as well as ours is spoiled by a small group."

It is obvious that there should be some sort of a "clearing-house" for DX programs. Each club should report its DX programs as fast as they are scheduled and when a certain wave for a certain hour has been preempted, "first come, first served," any later programs scheduled for such conflicting hour and wave, should be canceled or changed by the club reporting, upon notice from the "clearing-house." Were it not for the vast amount of work that would be involved, RADEX would offer to do this work as it now receives notice of all special programs direct from the stations involved. It is possible the cost of the work might be borne by assessment upon the clubs either in proportion to membership or to number of programs arranged. The entire matter is referred to the attention of the DX clubs in the hope that a joint committee may be appointed to work out a solution for this vexing question.

#### Our World-Wide Staff

We receive many comments on the accurate and up-to-the-minute data published in this magazine. Although we subscribe to radio publications from a number of foreign countries, our biggest asset is the great number of reporters we have (our readers) scattered all over the world from the northernmost shore of Alaska and Yukon to the most southerly in Chile,

Argentine, New Zealand and South Africa. To the loyalty and keen interest of these readers, we owe our success in keeping abreast of the ever-changing radio picture. As an instance, a single mail brought us five letters from New Zealand, each containing a notice of the reallocation in that country as published in our December issue. On behalf of the rest of our readers we thank these five friends for their prompt and thoughtful courtesy. They were S. N. Cartwright, Hakari, Mokou River, Mokou, N. Z.; George E. Bott, 507 Southampton St., E. Hastings; Frank Carr, 21 Lowther St., Wanganui; S. Robson, President of the NZDX Club, 100 Islington St., Invercargill; and H. B. George Lewis, 22 Union St., Palmerston N.

Says Mr. Carr: "2YA, formerly on 720 will be on 570 and 3YA will be on 720 after Dec. 1, with their new 3000 watt transmitters. I use a Philco 9-tube Model 90-E; my antenna is the four-wire type, 60 feet high, 600 feet long. I have verified over 200 American stations and others in different parts of the world. Would be pleased if any American DXer would write."

And from Mr. Robson: "Conditions for reception of American stations have been excellent during the past winter (the U. S. summer) and many new stations have been reported. Since writing last, I have verified a number of new ones among which were KWCR, WFEA, WABZ, KERN, KWG, WHBL, KGGM, KWSC, KMA, KMO, KMJ, KFBK, and KGFJ. September 10 was a great night with American stations coming in at great volume and I heard the calls of eight 100-watt: KDB, KIT, K FXM, KWG, KERN, KGFJ, KP Q and WEBR. Of these, KFBK and KGFJ were new to me and I have since received their verifications. European stations have not been quite so good in comparison with the three previous years but I have logged 20 new ones. My verifications

from European stations number 31 on the b. c. band."

#### Radio Buyers Beware

Another "dodge" which might well have been included in our story "Gypping the Radio Buyer" in the December issue, is that of selling a receiver that will "get the short waves" when it will only reach down to 75 meters. "I have a Fada all-wave midget set," writes F. W. Einstein, 601 West 141st Street, New York City, on which the salesman assured me I could pick up the s. w. stations. It tunes from 75 to 550 meters and all I can get on the short waves are the police, airport and television and, of course, the 'hams.' Is there anything I can do to get some of the world stations." Unfortunately, as will be seen from the lists of s. w. stations we publish, there is very little between the b. c. band and 75 meters except the amateurs, police, airport and television stations. The "world" stations are pretty well all below 60 meters and therefore entirely out of the range of this "all-wave" set. There are a number of sets on the market which "reach into" the short waves but they are not all-wave receivers by any possible stretch of the imagination and readers should thoroughly understand this when buying them.

#### This and That

"For the past month," complains Donald Weber, 1377 Park Ave., Plainfield, N. J., "I have been troubled with a strange buzzing noise in my set—in fact, all three sets in our house pick it up. When the antenna is removed it stops." The fact that three sets in the house pick this noise up is proof that the trouble is not in the set. This is also indicated by the noise stopping when aerial is removed. The next step is to see if the sets in neighbors' homes are troubled by the same noise. If they are it is coming from some place in the neighborhood. If they are not it is from within the house.



*Blue-eyed bluesinger, Loretta Lee, with George Hall's Hotel Taft Orchestra on the Sea-Bee-Ess, Saturdays at 8:30. This raven-haired, nineteen-year-old is a fellow-native with the Boswell Sisters of N'Orleans.*

Robert H. Weaver, 603 West Market Street, York, Pa., President of the National Radio Club, thinks it would be of great help if we could print a list of the mail addresses for the principal foreign stations on the b. c. band. None of the lists we receive from foreign countries contains the addresses. Can our readers help us? Send them in and we will compile them. This applies to Europe, Russia, Africa, Japan and China. We have the addresses for Oceania.

"My biggest peeve," concludes Kenneth Buxton, 282 Elgin St., Sarnia, Ont., "is that station that seems to delight to break into the middle of an overture to make a commercial announcement. Then I have to scramble all over the dial to find another station with the same program. I was listening to a band concert the other day and I had to get three sta-



tions to finish one program and then had to tune in a Canadian station to get the conclusion of an American band concert!"

#### From "Old Man" Henderson

Comes a letter protesting against our story in the December issue. He writes: "During the time intervening between the breakdown of the Department of Commerce and the burning of the Federal Radio Commission (which I claim was illegitimately borned), I went to Chicago and purchased the largest generator I could buy or that was manufactured at that time. Although my license, issued to me by the Department of Commerce who had been exercising authority they did not rightfully possess, called for 1000 watts, I put my power up to 3500 watts as at that particular time I had the right to do.

"I put the best coffee money could buy in a can, and the label, carton, postage on the package delivered anywhere in the United States for \$1.00. I explained that the coffee was not worth a dollar but the profit I could make on it was being used in my campaign to bring the people truths they couldn't get in the papers and leading magazines like yours.

"I did organize the Merchants' Minute Men (at a dollar a month dues) and furnished them with a card to hang in their windows, those who were not too cowardly to do so, but I furnished them with something you could or would not do—the truth. I have not consulted my books but I am sure the amount was not \$400,000.00. And—what if it was? I submitted to the Federal Radio Commission the amount of receipts and expenses of operation of the station and employing over a hundred people and I had nothing whatever to hide from them.

"Your next statement—'Henderson is now retiring from the air because of financial troubles' is only partly true. I have had my full quota of financial troubles, having been worth at least two million dollars in substantial properties which I was unable to

hold, and by paying the debts of the different lines of endeavors I was in, and actually took bankruptcy, giving up every single thing I possessed."

Mr. Henderson denies that the FRC refused to renew his license for KWKH and that, as a matter of fact, it was renewed as the "Hello World Broadcasting Corporation" with a blank of approval of transfer to the International Corp.

## Last-Minute NOTES

SOME stations have evidently been excused from the frequency tests and some have been added. So far as we know, however, the tests are continuing monthly but we regret we have been unable to secure a revised list. Ray E. Everly, Newton, Ill., tells us that WEED, Greenville, N. C., on 1420 will test the first Tuesday of each month from 2:30-2:50 EST and that WOPI, Bristol, Tenn., on 1500, will test the same day from 2:50-3:10.

C. Hesterman of the CDXR, wants us to call special attention to the DX program on Feb. 24 of CFQC as this will be the first and last of the year for CFQC which has agreed to put on the program only on the assurance that they will not be flooded with requests from other clubs for specials. Again illustrating the danger of oversolicitation by clubs. Mr. Hesterman and Stan Clifton will do the announcing and the former agrees to verify personally every correct report received provided it is accompanied by Canadian postage or three pennies. His address is 610 Third Ave., E., Saskatoon, Sask.

KFLV, Rockford, Ill., on 1420 has evidently changed its call to WROK as several have reported picking it up on test and the call was clear.

CJRM writes to Harvey Kees, Beulah, N. Dak.: "The CJRM transmitter you are now hearing was originally CJRW at Fleming, Sask. We moved it out to Belle Plains, mid-

(Continued on page 47)

# With the High Frequency FANS

• • • and PAGE TAYLOR

## SHORT WAVE DX CALENDAR

Eastern Standard Time:

Jan. 27, 12:30 to 1:30 am, CP5  
Jan. 27, 11 pm to 1:00 am, PAOASD  
Jan. 28, 2:30 to 4:00 am, VE9CS  
Feb. 4, 9:00 to 11:00 pm, CR7AA  
Feb. 5, 5:00 to 6:30 am, PK1WK  
Feb. 10, 5:00 to 6:30 am, PK1WK  
Feb. 10, 9:30 to 10:30 pm, YV3BC  
Feb. 15, 5:00 to 6:30 am, PK1WK  
Feb. 24, 12:00 to 1:00 am, EAJ25

Station CP5, 49.3 meters or 6.080 megs., La Paz, Bolivia, will dedicate their special program of Jan. 27 to readers of RADEX. Any fan who has not yet heard the interesting programs originating from this station should take advantage of this opportunity of hearing a truly unusual program. CP5 is owned by Compañia Radio Boliviana, Casilla 637, La Paz, Bolivia. They may be identified by the expression "Radio Illimani." CP5 is on the air daily with a power of 1 kw. from 9 to 11:30 pm, EST. On Monday, Wednesday and Friday they also work from 6:30 to 7:30 pm, and on Tuesday, Thursday and Saturday from 6:30 to 8 pm.

#### A Dutch Amateur

PAOASD is an amateur station owned by W. F. Jacot of Euterpestraat 73, Amsterdam, Holland. The wavelength used by this station, 79.57 meters is, unfortunately, usually covered with interference and atmospherics and it is doubtful that it will be heard with the small amount of power used.

CR7AA, like PAOASD, will transmit their special program at what is perhaps the best hour for reception in this country, but on account of the long wavelength and low power, it is doubtful that this station will be heard. CR7AA works on 84.67 meters and can be addressed at Box 183, Laurence Marques, Mozambique. The programs from PAOASD and CR7AA

were arranged through the courtesy of the International DX'ers Alliance of Bloomington, Ill.

Radio Service Engineers, Ltd., 734 Davie St., Vancouver, B. C., announce that on January 28 their radio stations CKFC and VE9CS will transmit special DX programs which will be dedicated to all radio clubs. VE9CS will work on 6070 kcs. or 49.39 meters with 5 watts power from 2:30 to 4 am, EST.

#### Those PK1WK Specials

A letter received from Mr. de Kort and printed in the January number of this magazine states that PK1WK works on wavelengths of 49.02 and 49.5 meters, but Mr. de Kort didn't mention which of these wavelengths would be used for the special transmissions which will be dedicated es-



Howard Marsh, ranking tenor of the light operatic stage and renowned for his leading role in "The Student Prince," is now on the new Buick program via the CBS, Mondays, 9:15 to 9:30 EST.

pecially to American listeners on Feb. 5, 10 and 15. As the two waves lie in the same band, however, it will be possible to skip back and forth between 49.02 and 49.5 until the station is heard. Address reports to Mr. J. F. W. de Kort, Radiohandel, Bragaweg 34, Bandoeng, Java.

EAJ25, The Barcelona Radio Club, Barcelona, Spain, works on 6.000 meg. or 49.97 meters.

#### A Happy New S.W. Year

1934 promises to be a very interesting short wave year. Many new stations are scheduled to make an appearance this year, and already some of these have been reported, such as RNE and UOR3. Before the end of the year short wave listeners can expect to hear programs directly from Ceylon, New Zealand, from various French possessions in Africa, and from Christmas Island. At the present time we can record the arrival on the air of Radio Budapest HAT, which was heard and reported simultaneously by Roger D. Causse, P. O. Box 6688, Lester, Pa., and Sam Kiamie, 2857 Sampson Ave., New York City. Mr. Kiamie writes, "This is a new station and came in like a ton of bricks last Sunday. They employ a female announcer and announcements are made very rarely. She says 'Radio Budapest HAT', first in Hungarian and then in French." Mr. Causse gives the wavelength as 41.53 meters (7.220 meg.), and the time of his reception as 3.22 to 3.47 pm, EST, also on a Sunday.

#### Wants Our Help

The French Colonial station requests the assistance of all shortwave listeners in helping them determine how their transmissions may be improved. Several readers have received questionnaires along with their verifications from this station, but all readers of this magazine can be of assistance if they will report on their reception of the various programs offered and include in their reports the answers to the following questions:

1. What is your exact location? (Latitude, longitude, City, State, Country).
  2. Are you situated in a mountainous region? wooded? dry? humid? near the seashore? What is the altitude?
  3. At what time of the year and at what hour is reception best?
  4. What receiving equipment do you use?
  5. What other shortwave stations do you hear regularly? their wavelengths? Are they better or less well received than Radio-Coloniale Francaise?
  6. Do atmospheric disturbances annoy you? When are they most annoying? Are they as bothersome on wavelengths above 50 meters?
  7. What do you think of our programs?
  8. What programs interest you most?
  9. How much time do you spend listening to them? What hours are most convenient for you to listen to them? At the present time these stations have four transmission schedules, given below in EST.
    1. 8:00 to 11:00 am, 19.68 meters (15.234 meg.)
    2. 11:15 am to 2:15 pm, 25.2 meters (11.898 meg.)
    3. 3:00 to 6:00 pm, 25.2 and 25.6 meters.
    4. 6:15 to 9:00 pm, 25.6 meters (11.711 meg.) 10 pm to midnight, 25.2 meters.
- Letters to this station should be addressed to: Ministère des Postes, Télégraphes & Téléphones, Direction de la Radiodiffusion, 103 Rue de Grenelle, Paris VII, France.

#### From Our Fans

"G6RX on 4302 kcs., 69.44 meters, roars in like a bear from 8 to 11 pm. This station is only testing but reception is wonderful; the volume and clearness amazes me. Records and short announcements make up the program with short intervals of dot and dash." This letter from Albert E. Lee, 30 Lakeside Ave., Pompton

Lakes, N. J., is typical of many letters received. Richard M. Carter and Charles Perdicaro give the address as Rugby Radio Station, Hillmorton, near Rugby, Warwickshire, England. Others reporting G6RX are Mrs. A. Wilbur, 80 Green St., Newark, N. J.; Bernard Remilland, 53 Washington St., Brattleboro, Vt.; Wm. Ross, Jr., 3521 Kroger Ave., Cincinnati; Robert L. Weber; Clarence Sargent; R. W. Evans; Guy R. Bigbee of Ft. Benning, Ga.; and Sam Kiamie.

"The Voice of the Prairies, Ltd.," operators of VE9CA, Calgary, Alta., hope, at some not too distant date, to resume their broadcasting on shortwaves. VE9CA works on 6.030 meg. or 49.72 meters.

#### The Byrd Station

Many listeners continue to hear broadcasts direct from the S. S. Jacob Rupert, which must now be close to the Antarctic ice barrier. On the arrival of the Byrd Expedition in Little America, KJTY will be removed from the ship and set up at the Main Base, at which location it will be known under the new call sign KFZ. KFZ will radiate 1000 watts power, and will work on about the same frequencies as KJTY. Another station, KFY, with only 75 watts power, will be set up at the Forward Base, using the same frequencies as KFZ. These wavelengths are given in our complete list of USA stations this month.

Listeners should be very careful, when tuning for KJTY or KFZ, not to confuse these stations with many others which are on the air at the same time relaying their transmissions. Some readers are reporting reception of KJTY on frequencies which do not tally with their Federally assigned frequencies, but which do compare with those used by stations in Bolinas, Rocky Point, Kahuku or even Buenos Aires. The complete list of stations of the United States and its Possessions given this month will aid readers in properly identifying stations which might be heard relaying KJTY or KFZ. This caution,



Here's the tiny cabin from which engineer John N. Dyer operates the radio control on the broadcasts from the Byrd Expedition aboard the good ship "Jacob Rupert." This is the only combination radio broadcasting studio and sleeping quarters in the world.

however, does not mean that KJTY cannot be directly received with good volume and clearness. Many interesting reports have been received, some of which follow.

"I have just left my receiver after picking up KJTY," writes Alfred H. Bacon, 928 13th St., New Westminster, B. C. "They were arranging Saturday's program for CBS and the position of the ship was given. They spoke of introducing the three stowaways in the program, and mentioned that their dogs also would have a part. They mentioned that the weather has been good and no icebergs have been encountered, although they expect to see some within three days. The operator said that the ship's bell and siren would be used as usual."

"Stations KEE, KKH, KKQ, KEJ and W2XBJ have been heard many times working KJTY," reports R. W. Evans, 832 Richie Ave., Lima, Ohio.

"These tests usually take place on Tuesdays and Fridays from 9 pm on, and the actual broadcast is Saturday at 10 pm. KKH picks up the KJTY signal and relays it to KEE, who sends it to New York. I received KJTY on a new special freq. of 9520 kcs. at 11:40 pm. For some reason they never mention frequencies in their conversations, all mention of kilocycles being made by referring to 'No. 7' or 'No. 11', with the exception of 9520 and 11830, which don't seem to have a code number yet." These two special freqs. mentioned by Mr. Evans were assigned temporarily for a period ending January 5th.

Other readers reporting good reception of KJTY this month are A. B. Baadsgaard, Ponoka, Alta.; Robert L. Weber, Doyle E. Carpenter and Stuart Walmsley.

R. W. Evans of Lima, Ohio, includes this additional data in his letter: "Station YVQ was heard on about 6700 kcs. rebroadcasting YV1BC near 10 pm. Station XDC near 9350 kcs. has been testing with music at 5:30 pm EST. HJ1ABB seems to be working on both 6580 and 6500 kcs. now. CNR, Rabat, Morocco, was well received on 8050 kcs. on a Sunday afternoon. I received a very nice verification from CT1AA for a program I heard last July, so you see it takes quite a bit of time for them to get around to answering."

### "Radio-Tananarive"

The Directeur des Postes et des Télégraphes of the Radiotelegraphic Service at Tananarive, Madagascar, advises us that the correct and only call sign of their station is "Radio Tananarive," not FIQA or FIUL. His letter reads: "The station does not have an indicative sign; the transmissions begin with a piece of recorded music entitled 'Ramona', and end with the French National Anthem. The station operates on 6000 kcs. with a power of 400 watts antenna. We transmit every day except Monday, programs consisting of musical selections rendered by artists, or record-

ings, as well as news flashes." The schedule is given correctly in our lists under the heading "Radio-Tananarive."

"Quite a few of the South Americans have been coming through with fine volume lately and there are several that I have not identified yet," advises Stuart Walmsley, 1316 W. 58th Place, Los Angeles, Calif. "I notice that YV1BC is using a new wave, just slightly below W9XF, and they come through like a ton of bricks here, with their sign-off coming at about 6:30 pm, PST. YV3BC is another very good station. They are usually on until 7 pm, and, for the benefit of those who have not tuned them in, they announce every half hour, as do practically all the S. Americans. HC2RL is coming through fairly well with their Tuesday night broadcasts and I receive them best between 7:30 and 8 pm, PST. HIX, Santo Domingo, came through here on their last special broadcast although reception conditions were not good.

"All last week I heard a station broadcasting between W9XF and YV1BC. I could not catch the location when the announcement was given but their call sounded like TGR. There is no such station listed and I have not heard it again."

### A New Peruvian

TI4NRH, Heredia, Costa Rica, was recently heard near 7 pm, EST by Clarence Sargent, Dansville, N. Y. "Their signals fade a lot," he writes. "The volume of this station varies, during a single broadcast, from R4 to R8, and the quality from QSA2 to 5. I have also heard a new station on about 48 meters, OCM, Lima, Peru. They broadcast very good music and request reports from SWL."

OCM has also been reported by J. A. Shanks of Russellville, Tenn. He postcards, "Do you know of a Colombian on the Hi frequency side of HJ1ABB? His call was HJ1A—(missed the last two letters). I also hear a Colombian on GSA's freq.,



*Strange folks and stranger ports are brought to you each Thursday at 8:00 p. m. EST over NBC-WJZ in Captain Diamond's Adventures. Al Swenson is the Cap'n, May Buckley plays his wife and Laddie Seaman, popular NBC juvenile, plays the part of Tommy.*

which I think might be HJ4ABI."

### And Other Colombian

Two readers report a new phone station in Barranquilla, Colombia, testing with WNC at Hialeah, Geo. W. Burns of 2466 Wahl Terrace, Cincinnati, stating that he believes the call letters are HJA3 and the frequency, 12.832 megs. Richard Carter, 820 McKinley, Ann Arbor, Mich., writes, "I heard a station on about 20.15 meters calling WNC and wishing to test with them. This station gave its location as Barranquilla, Colombia, and the call might have been HJS or HJF."

"My veri. from ZFS gives their address at Office of Superintendent of Telegraphs, Central Bay Street, Nassau N. P., Bahamas," contributes Mr. Carter of Ann Arbor. "Their traffic with England is irregular. Since then I've heard ZFS calling ZFV, South Africa, and a woman calling CQ to all ships. They sometimes have traffic with GYC and GYD, England, between

9 and 10 pm, EST, and have also been heard working VPSX. Tonight, 6:30 to 7:10 pm, I heard a station in Montevideo, Uruguay on approx. 29.3 calling New York. XETE was testing near 6:30 am one morning near 32 meters. IAC is coming in well again on 45.1 meters in the late afternoons. HIX has moved down to 49.5 meters to get away from the CW which seems to be ever present on 50 meters. YVR on 32.7 m. frequently works EHY, Madrid, near 4 pm. YVQ was heard relaying programs of YV1BC, and one evening they were heard on 44.96 meters rebroadcasting the German stations between 6 and 7 pm. I note that their 22.48 meter and 25.67 meter waves are almost always on at the same time."

### Some Brief Reports

"I believe I have been very fortunate in reception on the short wave bands, even though a bus line runs right past my door," comments Wm. E. Lewis, 618 Quincy St., NW., Washington, D. C. "I have received six Daventry transmitters and have a very nice letter from the BBC in reply to my reports. I have also heard G6RX, Rugby. The Deutschlandsenders come in well here, so I have been able to log the four Zeesen stations. They are also very good about answering letters. I just received a verification from Mr. George Abbes, owner of HIZ, Santo Domingo. He states that HIZ is on the air daily from 4:40 to 5:40 pm EST and broadcast special DX programs every Saturday night from 10 to 12 pm, EST. They only use 20 watts power in the antenna, but their volume is very good at this point of reception. I use a Philco Model 490, 2-tube built-in converter, and it gives very faithful service, even with the aforementioned electrical interference ever present. I will answer any letters I may receive, but am especially anxious to hear from owners of Philco 490's."

### Misses His European News

"A couple of Saturday nights I got the Byrd broadcast much better from



KKH than I could get it from the network," contributes D. E. Carpenter, Emmetsburg, Ia. "I suppose Byrd was using 13.2 megs. which of course had faded out here much earlier. PSK is the only one of the S. Americans which is consistently good. I2RO has deserted me while Rue de Grenelle was heard only five times this month. I have a personal grievance with London for taking GSF off the morning schedule. They were the old stand-by for the early news from Europe."

"Here is some miscellaneous information and a few observations on s.w. stations heard lately," contributed by Robert L. Weber, West McHenry, Ill. "PSK, 36.65 meters, announces that they relay programs from PRAG, and they welcome SHORT reports and will verify with a card showing views of the City of Rio de Janeiro. I have been very fortunate in receiving all three stations listed in RADEX for the Dominican Republic. Heard HIX this morning on their DX special. HI1A, according to a card received from them, work from 8 to 10 pm daily. These hours are Santo Domingo time, which is 20 minutes faster than EST."

News from Australia is contained in a letter from Clement Van Velsor, 1033 Sanford Ave., Irvington, N. J. "My Aussie friend reports that CQN, city of Macao, on 49 plus, is being heard around 4 am, EST, several mornings a week, and that ZHI, 49 plus meters, Singapore, is reported around 5 to 8 am, EST."

#### Some Tips

"Here's a tip for those who like to listen in on the 'ham' bands," suggests K. P. Williamson, 1610 Sherbrooke St., W., Montreal, P. Q. "On two successive Sunday afternoons I have heard K4SA, Porto Rico, on 20-meters. He comes in here with fine volume and I received a nice QSL card from him confirming my reception of his station. Prior to the bad spell on shortwaves, I was rather fortunate and added these new stations to my log: CNR, RV59, and SUZ,

which was phoning DGU near 6 am, EST."

J. A. Shanks of Russellville, Tenn., and Roy E. Robinson of Providence, R. I., have confirmations from RNE. The Director of the station, Mme. Inna Marr, told Mr. Shanks that tests between the USSR and the USA take place each Monday from 1230 to 1500 GMT. The address is given as: Commissariat du Peuple des Communications Postales et Électriques de l'URSS, No. 17 Gorki Street, Moscow, USSR.

"Less than a year ago, I received one of those wonderful Midwest 16-tube superheterodynes," writes the Rev. Jerome Shiltz, 120 Courtland Street, Wellington, Ohio. "I have received many foreign stations—EAQ, I2RO, FYA, CT1AA, GSA-B-D-E, VK3ME, DJA-C-D, YVQ, GBB-U. Also, of course, many amateurs and police from Maine to California and from Canada to Florida. I would be glad to hear from other Midwest users."

"I am using one of the Midwest 16-tube receivers which really goes after them," advises Richard F. Miller, 515 Ridgeway, Dallas, Texas. "GSA, 49.56 m., and DJC, 49.83 m., come in loud enough for rebroadcasting. I have EAQ, VK2ME and 3ME verified and will probably get one from Germany next month. GSA sent a nice card of thanks but did not verify. YV1BC and 3BC are almost like locals. LSN and KKP are very strong. But not a peep out of the Japs. Perhaps I don't get up early enough."

*The second edition of the DX Log of the World will contain the reallocation in Europe and New Zealand. It will be on sale at most newsstands on February 1st. Price 10c.*

# Using MICROPHONES and Phonograph PICKUPS

PART 2

• • • By B. FRANCIS DASHIELL

LAST month we discussed a few simple methods of attaching phonograph pickups and microphones to radio receivers. For those readers who wish to make permanent installations, and get maximum results, we suggest three circuit alterations which are not complicated. Any reader, who is experimentally inclined, can make the connections without difficulty. A study of the circuit diagram of the receiver in question will quickly show how the unit is to be placed.

In Figure 4, the circuit at the "low" end of the grid coil of the detector tube is disconnected at the ground. One contact of a two point switch (SW) is attached to the end of the coil, then the "A" and "B" output terminals of the unit are connected in series with the coil and ground, as shown. The lever of the switch is next grounded. The second contact of SW connects to the cathode of the

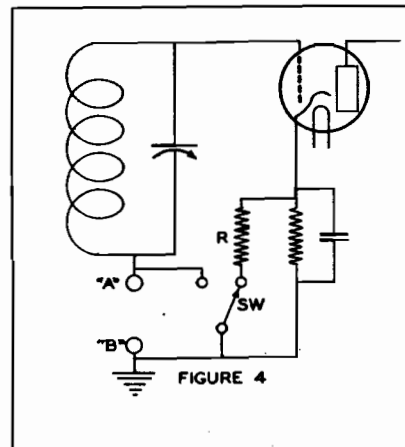


FIGURE 4

tube through a 5,000-ohm resistor (R), inserted so as to increase the bias when the unit is used. When the switch lever is set on the right-hand contact the resistor is cut in and the tube acts as a first audio amplifier, instead of biased detector. When the lever is set on the left-hand contact, the unit output is grounded, and the tube acts as the original detector for radio signals.

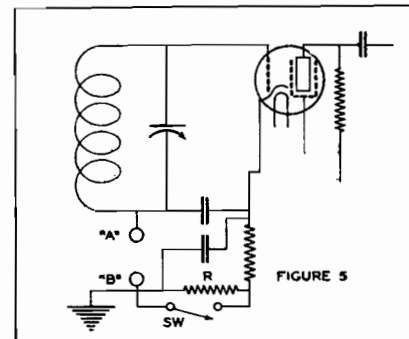
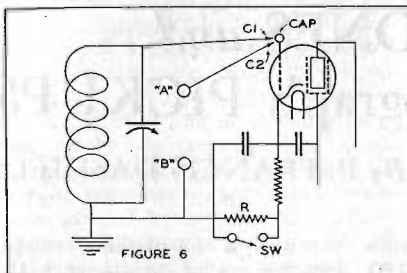


FIGURE 5

Figure 5 shows a somewhat similar method, except the switch (SW) merely shorts the resistor R. It is used when the detector grid is fed from an intermediate transformer stage (superheterodyne). When SW is closed, R is shorted, and the detector becomes an audio amplifier.

And, in Figure 6, we see an arrangement for any power detector of the tetrode type, such as a -24A, -32, -35, -36 and -51. The resistor R furnishes sufficient cathode bias so that the tube will act as an audio amplifier when the microphone unit is in use. Contacts are made to the control-grid cap of the tube. These two leads, shown at C1 and C2, must be changed whenever the unit is operated, for a



switch in the grid lead is impracticable. Similar arrangements can be made for detectors of the triode and pentode types, but changing the grid connections at the socket will be more difficult than at the top cap.

For diode tube circuits of the earlier types of tubes, the output unit ("A" and "B") can be applied to the leads across which the detected or rectified signal exists. For modern diodes, such as the -85 type of detector, the unit output is applied directly between the control grid and ground, or shunted across the grid-bias resistor. The triode section of the tube circuit is already taken care of by design, and the circuit is wired for audio amplification, so no alterations are necessary.

## Radio in BELGIUM

I AM a constant reader of RADEX as my home is in Brooklyn. I am now visiting in Europe. I have over 350 stations logged from my New York residence. In Europe, my aim is not DX, though I must say I have received outstanding results without even looking for them. Twenty days out of every month, WEA, WABC, WTIC, WTAM, WCAU, KOA, WBBM, and CKAC can easily be picked up here. The general signal is QSA 3-4, and R 7-8. These stations are all of a considerably lower power than most European stations. The maximum in the U. S. thus far is 50 kw. On the continent we have Prague with 150 kw., Luxembourg

with 120 kw., Leipzig with 150 and dozens of other high-powered transmitters which should certainly make themselves heard in North America. Yet the only European I was ever able to log in N. Y. was Radio Normandie. It's really some riddle.

European local reception can in no way be compared with that in N. Y. Save for one or two stations, the rest do not come in like those in N. Y. Besides the music, background noises can always be heard. This is not judged from the receiver I am using but from at least half a dozen in various locations.

Distant reception is something very puzzling. I can't make out how Moscow can come in here all day long without interruption. Surely no one in N. Y. can claim constant reception of even Chicago. It's just one of those mysteries which goes to make radio all the more interesting.

*F. Maybarduk, 217 Rue de Campine, Liege, Belgium.*



*Maria Silveira is the possessor of the lovely soprano voice you hear on those Saturday night broadcasts over CBS for the Byrd Antarctic Expedition. She helps William Daly and his orchestra cheer up the explorers way down at the bottom of the world.*

# STORIES of the Log Builders

## The Foreigners Are Coming in

SCORES of readers are this month joining for the first time the "Heard-Other-Continents" Club. That program of LR5 on December 3, was the key that opened a new field for many.

"Thanks to your DX calendar, I enjoyed a whole hour of the program of LR5 this morning," writes Ray H. Zorn, Troy Grove, Ill. "They came in very well and had a nice variety of selections. This is my second S. A. on the b. c. On the morning of Nov. 18, I received CX26 at Montevideo on 1050. My log now stands at 352 with 122 using 100 watts or less. My best: KFPM, CHML, XEFV, KPCB, KXL, WSYB, XEFZ. I use two sets; an Echophone 6-tube, several years old, and a home-built 3-tube which I use for local stations. I bought the first issue of your 'DX Log of the World' the minute I saw it and shall buy each succeeding copy. It is a much-needed and valuable book."

"Thanks to RADEX for a real radio thrill," exults B. S. Hastings, 4333 Coolbrooke Ave., Montreal. "I was able this morning to receive LR5, Buenos Aires, loudly and clearly on my 8-tube Atwater Kent. Don't cut any part of RADEX out," he adds. "My only interest to date has been the b. c. band but before many weeks, that s. w. section of yours is going to have me hunting a converter."

Another who received LR5 as a result of the notice of their DX program in our Calendar (thanks to the International DXers Alliance) was Frank Hilburn, 106 Mathew Street, Yoakum, Texas. Frank has heard several Japs and would like some tips on the best time to tune in some Aussies. He has increased his aerial from 25 feet to 200 and finds much better reception.

Among others who reported good reception of LR5 were Ivor Nixon,

Room 505, 45 Richmond St., W., Toronto; C. R. Anderson, 1026 1st N. E., Mason City, Iowa; Joe Stokes, 7318 Woodlawn Ave., Swissvale, Pa.; Frank Wheeler, 406 Eagle Point, Lakeside, Erie, Pa.; Earl R. Roberts, Newark, Ohio; Paul W. Craven, 190 Commonwealth Ave., Buffalo, N. Y.

"I am an ardent DXer," confesses J. M. Forbes, Keewatin, Ont., "and my log now totals 316 counting four police on 1534 and 1574. Some of my best: 2YA, CX26, LR5, CMCW, CHAB, 10-AT, 10-BI, CHRC, CKMO, CKWX and many others. I have not been able to pull in Japan or Australia yet but hope to after receiving my Time Converter.

### Defends Canadian Commission

"To the person who gives an unfavorable criticism of the Canadian Radio Commission in your December issue," continues Mr. Forbes, "I would like to say that, in my opinion, radio has never before been as well organized and of such a high standard in Canada before. I say, give the Radio Commission a chance. They've only started and I think they've made a wonderful beginning considering their handicaps and the terrible mess things were in when they started. As for the two-dollar license, I think it's cheap considering the fine entertainment sent out by the Commission with long harangues telling you what you ought to wear or eat or brush your teeth with."

And Clement Van Velsor, Irvington, N. J., adds: "The reader who complained about the set-up in Canada evidently likes the same type of program as many on this side, that is dance music and other such stuff. Whenever I cannot find anything but dance music in this country, I turn to Canadian stations where usually I can find good music."

### Tries His New Set

"A new voice is joining your fellowship from North Hollywood," greets Richard L. Bullard, 5649 Irvine Ave., North Hollywood, Calif. "I am entering the season with a brand new Midwest 16-34 chassis, and I am getting all prepared to make this the greatest in my career for DX. Since I have had the set, I have just listened here and there, hit and miss, to see just what the set could do. I am more than satisfied. In the face of poor DX conditions here on the coast, I have logged in the past month YV1BC, YV3BC, YVQ, Prado, LSN, Santo Domingo, Pontoise, EAQ, W3XAU, VE9JR, W8XK, W3XL, W1XAL, W3XAL, W2XE, W9XF, VE9GW, VE9CS, W2DAF—all on the s. w. On the b. c. band, I have received all the big stations and many smaller ones. On the long waves, above the b. c. band, I have had KCD, Oakland, KLK, Reno, KCAT, KCL and several others. You are going to hear from me often as I used to be an ardent DX fan with a 2-tube Harkness. I would be pleased to hear from other owners of the Midwest 16, telling about their results, aerial and ground installations, etc."

### From Alaska and Arizona

From Curry, Alaska, (Box 14) comes this report from A. J. Bubnik: "I have a Scott all-wave receiver and during the past seven weeks I have logged on short waves, W8XK, GSB-D, EAQ, W2XAF, W3XL, Pontoise, W1XAL, PSK. All these stations come here daily. I have heard a lot more but was unable to identify them. On the b. c. band, I have so far around 120 stations as far east as N. Y. I hear every night five or six different stations in New Zealand and Australia; Honolulu and Japan every night. Conditions for reception here in Alaska are very bad, however, on my Scott deluxe, I have been able to catch quite a few stations in these few weeks that I have had it."

"Perhaps my most unusual catch was KZRM, Manila, on 618.5 at 4:00

a. m. MST, on the morning of December 3," thinks Howard G. Mathis, Box 301, Holbrook, Ariz. "The program has been heard for an hour and a report has been sent in for verification. The station was strongly received but has not been heard since! On the b. c. band, I have received 384 stations including 2BL, 5CK, 2CO, 3FC, 2GB, 4QG, 4RK in Australia and 2YA in N. Z. My Japanese list has reached 22 and XGOA, Nanking, China. On the s. w., the list includes 32 b. c. stations, those outside the U. S. and Canada being GSB-C-E, DJB, EAQ, FYA, LSN, LSX, YV3BC, HJ1ABB, HJ1A, XETE, [VK2M E-3ME], RV15 and J1AA."

### Readers Report Progress

"I started DXing on December 25, 1931, and in exactly two years I have built up a log of 582 stations," sums up Stuart Russell Garnett, 4131 Wolf Road, Western Springs, Ill. "Of these I have 490 verified. Some of my best catches are YV1BC, LR5, 2YA, 10-AT, CKMO, KGFJ, KREG, WKAQ and CMCU. I have all the 10-s in Canada except BU. I have logged all the states but Rhode Island and Delaware and all the Canadian provinces but New Brunswick and Nova Scotia. My biggest surprise was winning a crate of apples as one of the three farthest listeners to KPQ's dedicatory program of their new 100-watt transmitter. Incidentally, this was my first 100-watter from the Coast."

"I received a fine veri from Radio Normandie just 19 days after I sent my report," announces Charles Leboeuf, Box 222, North Grosvenordale, Conn. "I expect one from Poste Parisian soon. These two French stations are on the air every morning at 2:15. I can hear their carrier wave about five minutes before they begin to broadcast. They broadcast phonograph records and news dispatches. I have also received LR5, KDFN, CMCA, CJOC, CRCS, 10-AK, CHNC, XEB, XEFO, FQN." Charles has a triangular-shaped aerial

about 300 feet in length in all. He states that it gives him good volume and very little fading.

### Through the Chicago Barrage

"Although I am located in the city of Chicago, where there are stations on many waves," begins a new reader, Blake H. Page, 3045 W. Washington Blvd., "yet I have succeeded in logging 437 stations with my 14-tube Zenith Model 103 which I have had only since last March. On December 13, between noon and 4:30 p. m., I picked up 32 stations from Mexico to Minneapolis and from New York City to Dallas. I use a cage 30-foot antenna with a shielded lead-in of about 40 feet. I am also using an ICA line filter." Mr. Page submits a list of stations received showing every channel, a number of them being completed.

"My log now includes all states with many completely verified; all channels except 1030," remarks J. Kenneth Vetter, 964 Waukegan Road, Deerfield, Ill. "I find DX practically annihilated on either 1200 or 1210 due to all-night pests. It seems to me, even though little restriction is placed on using the air from midnight until six a. m., that these stations take a very selfish attitude in the matter. My best catches so far this season are 2CO and LR5. Other fair ones are XETB, CMBK, KERN, KIEM and XEAI. Although many DXers report that CRCM refuse to verify, I received a very nice letter from them about three weeks ago."

### Notes and Tips

"We were obliged to suspend our DX programs six weeks ago after putting on only two or three," writes Wendell Cox of Station XES, Tampico, Tamps. "We now wish to resume these but would like for you to advise us the best days and the best hour. We intended to use the first and third Saturday morning of each month at 1:00 a. m., or just after KYW, Chicago, also on 1020, signs off, and that time would be convenient if no other station is on 1020

at that time." We have advised XES that inasmuch as they have practically a clear channel except for KYW, these hours should be entirely satisfactory. We may not have a confirmation from them in time for this month's calendar but listeners would do well to try to tune them in at the hours they mention.

We are glad to be advised by CHAB, Moose Jaw, Sask., that the report of their death, like that of Mark Twain, was "greatly exaggerated." "We are on the air broadcasting on regular schedule," writes H. C. Buchanan, Secretary. "Our station is owned by the people of Moose Jaw." Also comes a correction from 10-BQ at Brantford: "On page 39, January issue, you state 'CKPC formerly 10BQ now Brantford.' Would you kindly make correction of the above. CKPC and 10BQ are separate stations. CKPC was formerly of Preston, Ont., is now located in Brantford. 10-BQ—"The Little Station of the Hill" is still operating in the same old way."



Here is the wicked "Ardala Valmar," the feminine villain of "Buck Rogers in the 25th Century," Monday to Thursday on the CBS. Elaine Melchior as the fascinating Ardala is plotting among the planets to rule over Venus. We're going to vote for her.



"The new radio station here in Springfield (Mo.) is to begin operating regularly at 6:00 a. m. CST, Monday (Christmas) morning. A last-minute change in call letters was made from KGIZ to KWTO ('Keep Watching The Ozarks'). It will be on 560 with 500 watts. I think they plan to use KGBX's frequency check in January." Thus reports James Owen, 1019 W. Webster, Springfield, Mo.

"Here is a tip for those who have not logged British Columbia," offers Richard M. Carter, Ann Arbor, Mich. "CRCV comes in well every night from 1:00-2:00 a. m., EST." Richard adds "Radio certainly is peculiar. I heard the harmonic of WDAS on 4,110 kcs. at 4:00 p. m. and that of WGLC on 6,850 at 8:00 p. m., both 100-watters and impossible for me to hear on the regular b. c. band at those hours."

"There are two Newfoundland stations you never list," points out Harold Canning, 617 W. Highland, San Angelo, Texas. "They are VO GT, 950 kcs. 100 watts, Bell Island, owned by the Rev. Mr. Rawlins, and Vo8A, 6800 kcs., St. Johns, owned by E. Ash." We were advised some time ago that VOGT was off the air. Can some of our eastern readers verify?

XEAE, Tijuana, B. C., on 980, has joined the all-nighters, according to Clarence C. Borgen, Mountain Lake, Minn. They will be on the air every morning except Sunday from late in the evening until 5:00 a. m., EST.

The new official list of the Canadian Radio Broadcasting Commission does not show CJ RW, Fleming, Sask. Has it been deleted or is this the new station CJRC, 1390, Middlechurch? Will some of our Saskatchewan readers please advise us?

"WCBM, Baltimore, broadcasts our DX tips every Friday morning at 12:01 EST and KDKA every Monday at 12:30 a. m.," says A. W. Oppel, Executive Secretary of the NNRC, and adds: "Radio Normandie, 1328 kcs., Fecamp, France, is coming through quite steadily every morning

except Sunday for an hour after the start of their regular broadcast at 2:15 a. m., EST."

## HELP WANTED

### Male or Female

WHAT good Samaritan will give these readers a helping hand in solving their problems?

"Tuesday a. m., Dec. 19, CST, I tuned in on my Majestic 131 t. r. f., a station on exactly 980 kcs. after XEAE had signed off at 1:30 a. m. This station announced they were in San Diego, Calif., and said they were the greatest little 50 watt station in the world. They played recordings and were ashamed to give their call letters. They were on until four a. m." This sounds like an outlaw. Perhaps some reader in San Diego can tell us.

"I always hear a very weak station on about 1054 kcs. at 2 to 3 a. m." resumes Mr. Jesse L. Lausman, 717 S. Shelby St., Louisville, Ky. "They broadcast stock market reports of British controls and talk about farming, wheat crops, etc. Who could this be at such an hour?" The stations in Palmerston North, N. Z., were on 1050 until December first. Since that date Dunedin stations have been on that channel—4ZM and 4ZO—but these have only 100 and 25 watts respectively. Can anyone make a better guess?

F. Wiseman, 13 Kyle Street, Scotswood, Newcastle-on-Tyne, England, proves his reception in an unmistakable way by reproducing the program on a phonograph record and mailing it immediately to the station heard. Now he is stumped with a station heard on 1000-1010 kcs., below WBZ and above KWJ. The program was organ music. The speaker said "WHA (or WAK) broadcasts for James Winston . . . New Haven." Mr. Wiseman has played his record over and over and feels sure the call is WHA.

It was not, of course, WHA on 940. Mr. Wiseman is exceedingly anxious to identify this station and if any reader can think of a solution, he should write Mr. Wiseman at the above address.

\* \* \*

"Since last writing you, my log has increased from 414 to 508," counts up David Walton, P. O. Box 87, Picton, Ont. "My recent catches include LR5, HIX and VE9EK. In answer to Ernest Byers in the January issue, I have heard the slogan 'The Voice of the Adirondacks' used by WHDL at Tupper Lake, N. Y., on 1420. Who can tell me what station was broadcasting on 1210 on the morning of Saturday, Dec. 23, using only Spanish? (XETZ is on 1210) Does WIND ever sign off before KTAB? Every time I try for the latter I am foiled by a 'Milkman's Matinee' or something."

\* \* \*

"On Dec. 3, I heard a French-speaking station on 1320 kcs. from 2:30 to 3 a. m.," says Paul W. Craven, 190 Commonwealth Ave., Buffalo, N. Y. "I couldn't identify him because of the heavy static. Did anyone else hear him? It wasn't a harmonic of CKAC because they weren't on at the time. (Ed. Fecamp, France, is on 1328 and has been rather widely heard in the U. S.) Am using a Stewart Warner all-wave 8-tuber. Would like to hear from anyone who has a similar set."

\* \* \*

On Christmas morning, W. T. R. Morris, Jr., 3219 Garland Ave., Richmond, Va., picked up a mystery station on 1280 in a language he could not understand but which sounded like a mixture of German or Italian. The station faded at dawn which was another indication of its being a foreigner. He feels sure it must have been Lodz, Poland, on 1283. The program was typical of Christmas with a chorus which sang several well-known anthems. Did any other reader chance upon this program? It



If you've wondered if Rubinoff is as black as Eddie Cantor paints him—well, here they are in a studio on the movie lot in Hollywood with Eddie still in his "Roman Scandals" makeup.

was logged from 5:50 until 6:50 a. m., EST.

\* \* \*

"My set is a Stewart-Warner, Model 102-B, with a built-in converter, Model 301-B. Six tubes are used with two more in the converter. I have not been entirely satisfied with the operation of the converter. The only stations off the continent that I can pick up are Pontoise and GSE, Daventry, both on the 25 meter band. Have also heard BSA on 49.56 m. I would like to hear from someone who is using the same models as to their results on the s. w. converter." The inquirer is Edgar W. Jones, 1250 5th Ave., S., Lethbridge, Alberta. Who can help him?

\* \* \*

"Every morning, about 3:00 or 4:00 some weak station broadcasts on the same channel as WTAM (1070)," says Joel H. Armantrout, 602 E. Magnolia St., Fitzgerald, Ga. "I cannot catch the call as the signal is too faint. Could you tell me what station this is? I have a 1934 6-tube Philco midget. I have had it only

two months and in that time I have logged 306 stations on the regular b. c. band of which 76 are 100-watt." Joel wants to join a good DX club.

\* \* \*

"I recently purchased a 10-tube Clarion superhet. Sunday morning, Dec. 10, around four or five a.m., EST, I turned the dial to 559 kcs. and heard a program with the announcement 'This is D9AN testing.' To make sure I listened to another selection and then the same announcement. He talked about European broadcasting but I could hold them for only ten minutes then they faded completely. Can you help me identify this one?" This query is from Paul Spachman, 13 Hillside Ave., Souderton, Pa. Who can help?

\* \* \*

It is our understanding that the Radio Commission is excusing some of the stations from further frequency tests, perhaps after they have been successfully and correctly checked. No announcement is made of such exceptions. William Benz, 4717 Morganford Road, St. Louis, writes that he has tried hard for WKAR, East Lansing, and WJEM, Tupelo, Miss., on their checks without success and wants to know if any others have logged them during these periods.

\* \* \*

If anyone has succeeded in sharpening the tuning of his set in the lower frequencies, Philip Mehler, 97 Champlin Ave., Liberty, N. Y., would like to hear from them. He, like many others, is greatly troubled by cross-talk and heterodyning on the channels from 550 to 610.

## Some NEWSY Notes

UNDER date of December 13, Dan Davis, Principal of the High School, Maud, Okla., writes: "KO CW, formerly at Chickasha, Okla., and later moved to Tulsa, has never broadcast since the move and at present are in a U. S. bonded warehouse

waiting some kind of legal settlement. Oklahoma, long noted as a land of outlaws, seems to have an outlaw of another nature in the form of a radio station M CO at Ada, Okla. They seem to be operating on about 15 watts power and have worked up quite a commercial business by advertising. They broadcast from noon until dark and sometimes at night, operating on about 690 kcs.

"I suppose that I could not be classed as a regular DXer as I never ask for verifications but I am always sure of the station I receive. I always wait until I hear the call letters and the name of the town before I log it. At the present time, my log says 444 different stations. My best catches are JOBK-1 at Osaka, Japan, JOHK at Sendai, KGU, 10-AT, 10-AB, HHK, LR5, WKAQ, and quite a number of 50- and 100-watters. Radio is surely freakish. Since the one morning that the two Japs came in over the loudspeaker with volume sufficient for my wife to hear them in the next room, I have never been able to hear a sound at the same place on the dial. My radio is a Majestic 20; my aerial is a single wire about 100 feet long, 10 feet above the one-story house in which I live. My ground is an old automobile spring buried in rock salt."

### Tuning Other Continents

"I am happy to say that I am now a regular listener to the T-P VKs and ZLs, being able to tune them in nearly every morning," Charles Meyer, Jr., 411 Blake St., St. Joseph, Mo., arises to remark. "But I wish somebody would give me a receipt on how to tune in the JOs, though, as I have heard only one, JOHK, and that very faint. My total log is now 442 with my best catches being CX26, LT1, 10-BQ and 2UE. Here are some answers to inquiries: To D. F. Mason: Your station in all probability was LR2 as I receive occasionally several of the S. A. stations in the background of the U. S. stations. To A. Belanger: I can't give you any info on YV1BC but you can, per-

haps, log KGU when they sign off at 3:00 a. m. CST. To S. B. Leland: Your station is 2BL in Sydney, on 855, which I receive quite loud from 4:00 until 6:00 a. m. CST. Following are some DX tips from the IDA 'Globe Circler':

11:30 p. m. LR4, Buenos Aires, 990 kc. 20 kw.

1:15 a. m. Poste-Parisian, 914 kc. 60 kw.

5:00 p. m. Rabat, Morocco, 721 kc. 6 kw.

12:10 a. m. Beromunster, Switz., 653 kc. 60 kw.

2:00 a. m. Bordeaux, France, 986 kc. 13 kw.

Midnight, Frankfurt, Germany, 1157 kc. 17 kw.

8:30-10 p. m. LR5, Buenos Aires, 830 kc. 27 kw.

"The times are CST. Readers should keep trying for these at about these times and perhaps they, too, will be lucky enough to pick some of them up."

### Tuning All Waves

"My set is a Scott all-wave now three years old but I would not trade it for any other set except another Scott," begins Rudolph Bossert, 294 Roycroft Drive, Rochester, N. Y. "Since last year I have learned how to find the short waves and now use my set all day long on short waves only. I receive all of the English stations like locals, also the Germans. I am listening to DJD as I write this (4:15 p. m.). The South Americans come in well now. I get VK3ME and VK2ME whenever I try for them when they are on. Have logged police phones from California to Texas and from Montreal to Florida, to say nothing about amateur and airports. Answering Russel Geiger, I also receive the station he mentions; it is CMCA, 834 kcs. Colon (suburb of Havana) as I heard it announced. (Has CMCA moved from 1230? Ed.) With WH AM right here in Rochester, I can tune in the stations on either side—KVOO and WAPI on 1140, WO WO, WWVA on 1160." Mr. Bossert has

an aerial in his attic in the form of a coil, about 8 by 14 feet with 200 feet of enamel stranded wire. He says this aerial is good on long or short waves and receives equally well from all directions. The trouble, of course, with most inside aerials is that they pick up all the noises of the house wiring. Evidently Mr. Bossert is not troubled.

### When Pests Are Silent

In his "first letter to any publication," J. R. Mappin, P. O. Box 1264, Avalon, Calif., says: "Regarding KGFJ, our 24-hour station, I notice some kicks from readers that it hogs the 1200 channel and prevents them from tuning in other stations on that frequency. You might publish the fact that during the monthly frequency tests, I have found KGFJ off the air." This is a good tip and applies to many other channels besides 1200. Instead of tuning for the station that is being checked, tune for others on that frequency who



Each Saturday night on the Columbia net, George Jessel features a "phoned conversation" with his mother that has become a popular radio bit. During one of his recent broadcasts, George's mother, Mrs. Charlotte Jessel, dropped in "in person."

may not be required to be silent because of distance from the station checked.

"I recently purchased a Philco all-wave Model 16-B," goes on Mr. Map-pin, "and have had very good results on both the b. c. and s. w. bands. On the s. w., my best are GSB-E-F, VK2-3ME, PRADO and YV1BC, RV15. On the b. c. I have received eight Japs and two Australians—2BL and one on 760—I only caught —KY and cannot identify it. The announcer said, 'it is 15 to 9' when it was 15 to 3 a. m. CST. This checks with Australian time. Thanks to the December RADEX, I picked up KJTY. While listening to their program over the CBS Saturday, December 2, I tuned to 6.650 meg. and was surprised to hear them with just as good quality and volume as on the rebroadcast."

#### KJTY Better Direct

William Mundt, 828 Broadway, Bethlehem, Pa., had a similar experience. "When the CBS program was on (Dec. 2) I decided to try to tune in KJTY direct. In less than one minute I had them; they were then a few hundred miles off the coast of N. Z. When the program started I listened on our b. c. receiver and found that the quality of the speech as it was rebroadcast by WHAS wasn't nearly as clear as what I was getting direct from the ship on s. w. After the special was over, I kept KJTY and heard some very interesting bits of news about the expedition. At times I could hear footsteps in their radio room and I heard someone operating a typewriter. They were on about 41 m. They signed off at 11:50 p. m. EST. I had held them for an hour and 55 minutes. I have a 12-tube Lafayette b. c. receiver and a Silver-Marshall s. w. set with four tubes constructed five years ago.

#### Gets Europe Regularly

"When I wrote you last March, I had a log of 350; it is now 672," reports Robert Hough, 26 Ellerton Ave.,

New Rochelle, N. Y. "I replaced the detector tube (27) with a 56 and made the set about 40 per cent. more sensitive and about 25 per cent. louder. The week preceding Christmas was sure swell for Europe. I have been getting Poste-Parisian regularly every morning at 2:12. From the 16th to the 23rd, inclusive, I logged: Toulouse, Bordeaux, P-P and Fecamp in France. (Incidentally P-P is having special programs for British listeners in English from 6:00-6:30 p. m. Sundays. If you can separate them from CRCM, they have excellent volume.)

"I also logged Stuttgart, Frankfurt-am-Main and Breslau in Germany and IIBA and IITO in Italy, SBH in Sweden and Hilversum, Holland—eleven in all. I find that Germany comes in best from 1 to 2 a. m., France from 2 to 3 and Italy from 2:30 to 3:30. With eleven Europeans to my credit, I seem to have no luck with the Aussies or ZLs and haven't yet been able to get either Hawaii or Alaska. One hint to DXers—tune very slowly. Fecamp comes in on a hairline and with American stations on both sides, it is easy to miss him." Robert does not tell us what set he has.

#### Recipe for T-P's

"In regard to the letter of Mr. Welsh of Reynoldsville, Pa., who complains that the DXers who report reception of oriental stations fail to assist others who have been unfortunate in failing to receive them," preambles Raymond C. Corbett, 619 12th St., Sacramento, Calif., "as far as I know from my own experience, there are no definite means of telling whether the Japs are coming in or not. If the Aussies are coming in well, it doesn't indicate that the Japs will also be heard. I have discovered no definite rules by the seasons. If all DXers will concentrate on 770 kcs., I am positive that, sooner or later, if they have any good location at all, they will be able to hear JOHK at Sendai, Japan. This station actually comes in as loud as

some of our Pacific Coast stations at times and their signals should penetrate the eastern part of the U. S. loud enough to be at least identified. JOCK on 830 and JOAK on 870 come in almost as well as JOHK. The best time for eastern listeners should be from 3:30 a. m. EST, on."

#### A Field on 1510

"In looking through RADEX, I notice you have KFQD in Anchorage, Alaska, on 600 kcs. but in the last few months I have received them on their old frequency of 1230," says D. Stevenson, 3893 38th Ave., W., Vancouver, B. C. The FRC changed KFQD some months ago. Can any other readers verify Mr. Stevenson? "Fans here in Vancouver have one radio feature that others do not have," concludes Mr. Stevenson. "That is many stations on 1510. Logging in the forests near here is extensive and a great many tugboats are employed to bring the logs to Vancouver. They are equipped with radio-phone transmitters using 50 or 100 watts power with a range of 50 miles. They are on the air at certain hours, carrying on conversations with their owners, coast stations and other tugs, about the weather, their positions, etc. It certainly makes good DXing although they cannot be verified. I have logged 20 tugs, 4 passenger ships and 3 coast stations out of 55 available."

#### A Tip on YV1BC

"That station Russell Geiger asks about on 835 is CMC, Havana," thinks R. B. Rolfe, 1741 Burnett, Waco, Texas. "I have picked them on three different nights and they are on 835 more nearly than 830. They always sign off with an announcement in English. The announcer talks Spanish very rapidly, so much so that, though I have been associated with Spanish-speaking people all my life, it is very difficult for me to understand him at times.

"I have at last gotten the much-received YV1BC, Caracas, Venez.,

and here is a tip for the boys in Texas who find they can't pick him up. XEAW does not come on the air until 7:30 p. m. now and, if they will tune very close around 960 kcs. between 6:00 and 7:30 p. m., they will likely hear YV1BC. I have had them three nights now with good speaker volume and a good, clear signal. My log stands at 256 with all the states but seven."

#### Radio DX in Haiti

From Port-au-Prince, Haiti, a fine list of stations received in that island Republic is submitted by R. A. Gravel who has concluded his diplomatic work with the treasury department of Haiti and returned to his home in Southbridge, Mass. Mr. Gravel reports that reception in Haiti is very difficult and while his pretty well covered the United States, Canada and Mexico, the stations were more or less limited to those above 10,000 watts. On the short waves, he received W3XAL in daytime and the volume of GSA would drown out Schenectady. Mr. Gravel adds: "I am sorry that my tour-of-duty in Haiti has been brought to an end at this particular time as I believe I could have registered many more stations," thus showing the true DX spirit.

#### T-P's in Tennessee

"It seems to me this section of the country should be ideal for DX tuning," observes a modest reader in Johnson City, Tenn. "In each issue of your magazine, I read letters from listeners who say they receive stations in Australia, Japan and New Zealand but none of them seems to be in my part of the country. I have a new 12-tube all-wave Silver-tone and can pick up any station in this country as well as many in Mexico and Canada, but never one of the Australian or Japanese. I have stayed up many a night hoping to get at least one but have had no luck. As for the short-wave end, I receive Germany and England practically every day and have received others in South America and the Bermudas. I



also picked up Byrd's ship, when it was near the Canal Zone." Come on, Tennesseans; let's see what you can do across the Pacific.

#### Wants All the Police

"I was glad to find that 'Just Above the 1500 Channel' in December issue," comments Bill Garrison, 122 E. William St., Bath, N. Y. "However, I believe it could be made even more useful to those of us who get coppers on our b. c. sets, if you included the police broadcasting on 1712 kcs. (In this issue you will find the s. w. stations of the U. S. by frequencies beginning with 1534 and running clear up to the Canadian police on 17,330. How's that for service? Ed.) I am sure I caught FQN on 572 between 3:26 and 5:30. They were so weak that all I could get was the time of several announcements, unidentified marches and several xylophone selections. Did anyone hear them?"

#### They Do Verify

B. L. Ahman, Jr., 3313 Westwald Ave., Baltimore, thinks the station D. F. Mason heard near WABC was undoubtedly CMX who is supposed to be on 890 as he picked it up between WGBI and WABC or on WENR's channel. "I think some readers demand too much haste in a verification from their reports," adds Mr. Ahman. "I have verifications from every station except two that Mr. McPhole of West Philadelphia complains do not pay any attention to reports. From WTFI, a nice card, from WTOC a card, from WLBL a picture folder with veri., from KFDM a personal letter, from KFJB a nice card, from WBTM a printed reply with a personal postscript and from WIND a letter."

#### Boiled Briefs

"An old variocoupler makes a good tuning coil for the antenna and even on a superhet I think it pays," suggests Ivan D. Ide, Genoa, Ill. "I use a 12-tube super and with a tuning coil like that I can find stations that otherwise I would not be able to tune

in. Then, too, I log many stations during the day time that I cannot get at night. A station like WSAZ on 1190 would be impossible for me at night because WO AI would drown them out, but in the daytime they are possible. KSOO, too, I picked up between noon and one o'clock."

Don Martinez, 1469 26th Ave., San Francisco, has received so many stations that he finds it difficult now to add new ones. He is having a s. w. converter built and is looking forward to exploring what is to him virgin territory. "The Japs have been bad lately for the first time in years," he adds, "but I have a few more Aussies on my list. XGOA is on 650 as, believe it or not, I heard their call letters in English four times on 650, three times by a man and once by a woman." (Several other readers have reported XGOA on 660.)

"Before I go into details, please refer me to a good DX club," prefates F. B. Pitts, Belle Fourche, S. Dak. "I have a Majestic 8-tube Model 90-B and a Model 15 5-tube midget Majestic. I hooked up both radios with no power on the big one and did my tuning on the 5-tube. In that way I had the same as a 13-tube set! Vancouver on 100 watts came in too strong." Mr. Pitts seems to try odd experiments. He disconnected his ground from the midget and used as an aerial a short piece of wire with the free end in a glass of water and got better results than with a regular aerial!

"I have finally identified the Cuban I heard on 635 kcs. as CMJH, Ciego de Avila," says R. M. Carter, Ann Arbor, Mich. "I have now heard them announce plainly several times." Who has anything definite from CMJH showing a change from their frequency of 1150? "I heard CFCH, North Bay, Ont., on 915 instead of 630," goes on Mr. Carter, "they were giving a DX program one morning recently. Wellington, 2YA, is being heard on their new frequency, 570, but not as well as they

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## What's *the* MATTER with My Set?

Answered by the Technical Editor

**I** AM using a G. M. converter (remote control unit) with a Philco 43 receiver. At present this combination does not give good selection at 535 kcs. because of local stations on 540 kcs. The control used to work fine with a Kellogg receiver when set to 535 kcs. as recommended by the makers of the unit. Can I replace the condensers in the Philco to make a better selection at 535 kilocycles and reduce station interference?

The G. M. converter is a remote control unit suitable for use with any broadcast receiver. It is arranged to form a 535 kc. beat note with any receiver when a broadcast station is feeding this beat into the input of the set. To avoid trouble with 540 kcs., local stations, the converter padding or trimmer condenser system can be adjusted from 570 to 590 kcs., and the receiver tuned to this output. There are also any number of possibilities of beat notes being formed in the various circuits because of the two oscillators working together—one in the converter and one in the receiver.

The converter should be lined up for tracking, etc., just as any superheterodyne receiver. It can then be applied directly to any receiving set without difficulty. We suggest you have the converter adjusted at the trimming condensers to increase its frequency range as mentioned above, and then set your Philco 43 on about 570-590 kcs. Changing the condensers of the Philco will not help.

#### Changing Rectifier Tubes

*Can I use the 83 type rectifier tube in my Scott all-wave set instead of the type -80?*

We do not recommend this change. The 83 is a heavy duty rectifier tube and is intended to supply large amounts of d.c. power to receivers whose requirements are in excess of

the output rating of the -80 tube. The 83 takes one ampere more of current, which perhaps your set can ill afford to give up. The -80 now gives you all the d.c. power the set requires and there is nothing to be gained by using an 83 or an -82 tube.

#### Power Line and Wave Trap

*A nearby power transmission line gives me much constant interference. How can I combat this and to whom should I write or talk? Will you tell me how to make and use a wave trap to prevent this and other interferences?*

Power line interference is a matter to be taken up with the power company. Complaint to the Radio Inspector in your district (Department of Commerce) is not likely to be effective in this case. Such interference usually is due to the electro-magnetic field that surrounds every high voltage a. c. power line. If a leaking insulator or transformer is at fault, then it is to the advantage of the company to catch the leaks.

Your aerial should be as far as possible from the line and will be less subject to interference if erected at right angles. Shielded lead-in wire, as explained in the October, 1933, issue of RADEX, will be valuable.

Wave traps can be of some little help when radio stations tend to interfere. Make such a trap by winding a coil on a tube 2 1/2 inches in diameter with 60 turns of No. 26 wire. Connect it in series between the aerial and the receiver's antenna terminal. Then attach a .0005 capacity variable condenser across the two ends of the coil for tuning.

#### Using Two-Volt Tubes

*Is it practicable to change my Atwater-Kent, model 33, set, from -01A tubes to the 2-volt tubes?*

Two-volt tubes can be used in this

set merely by substituting -30s for the 01As, and a -31 for the -12A. But the negative C battery must be increased to -22.5 volts, and the B battery for the plate of the -31 must be 135 volts. The audio fixed resistor attached to the center of the rheostat and connecting one side of the filaments of the last two, or audio, tubes, must be removed and replaced with a length of wire.

A two-volt battery is used. If other voltage is connected to the two terminal wires—red and black—a variable resistance must be inserted in series with one of the wires so that exactly two volts is impressed on the filaments when the set is operating.

#### Set Quits When Warmed Up

*My General Electric set, model S-42, refuses to work as soon as it becomes warmed up. After a few moments of loud operation it becomes weaker and then quits. No sound from the speaker at all. The tubes have been tested and are perfect and there are no visible faults in the wiring. What shall I do?*

While it is difficult to localize the exact cause of your trouble at long range it may be well to point out a few of the weaknesses in your set which tend to cause the trouble mentioned.

The trouble is characteristic of a defective high value resistor. Test or replace the 270,000 ohm resistor that connects between the positive B lead (22.5 volts) and the grid return of the first detector tube. Also, the 350,000 ohms resistor from the second detector grid return to the one just mentioned. Also look to the 350,000 ohms resistor from the second detector grid return to the negative B terminal. Test all high resistors in the second detector plate and first audio grid circuits. Other than these you must look at every resistor with suspicion. A carefully made meter test of the entire circuit will next be in order.

#### Hum and Motor-Boating

*I have a Pilot a.c. Super-Wasp*

*short-wave receiver. I get a very bad hum. Also, when the set is turned on it has a motor boating or jumpy sound. Outside of this the set is perfect. I use a regular Pilot power pack unit.*

Usually this trouble can be traced to the detector plate circuit. A plate series resistor of 20,000 to 50,000 ohms shunted with a 0.5 to 2.0 mfd. fixed condenser will serve as a filter to eliminate the motor boating sounds. A radio-frequency choke in the detector plate circuit, properly bypassed, is often very helpful. Some of the Pilot models have these chokes.

The hum ordinarily will be reduced by lowering the grid leak valve, but as the sensitivity will also be reduced it is not well to carry this method too far. If the hum increases with the degree of regeneration it will be well to shield the lead-in wire and see that the shielding of the set is adequate and properly fitted. Loose shield cans which need refastening and cleaning at contact surfaces may cause hum and chattering noises or undue oscillation. See that the tubes are testing perfectly.

#### Certain Short Waves Weak

*I have a Philco, model 43, which suddenly lost its pep on the 9 to 20 megacycles band. Until a few days ago I have been receiving European stations regularly on strength R9. Overnight, the set lost its ability to pick up these stations. A service man claimed to have found that the set was unbalanced. But still the receiver is weak on that particular band to voice, and most of the c.w. code signals are not quite as good as formerly, but still do not seem poor enough to account for the sudden absence of the voice stations. The set is perfectly normal on all the other bands. I cannot even hear the carrier wave of EAQ—a station which has been heard every night for the past ten months. Can you advise me what is wrong?*

Sometimes the oscillator tube will fail at the very high frequencies and

make one or more of the short-wave bands almost totally dead. It is therefore best to try several tubes until one is found which will oscillate strong enough to bring in the signals. An unbalanced condition of the circuits in this set under the circumstances outlined by you is hardly probable. One likely trouble is that of dirty contacts on the short wave band selector switch. The slightest resistance in one of these contacts will cause great trouble at high frequencies. This set is very sensitive to changes in antenna length or height and also to various ground connections. At very high frequencies the ground is usually unimportant, and in some cases even weakens reception. If any change was made in either the aerial or ground system this should be considered a possible source of trouble.

Of course, some changes in the condenser and balancing system could throw some part of the band out of adjustment in reference to the tuning dial but hardly prevent reception at all. Since you have had the set rebalanced this question can be ignored. Be sure that the first detector is a good tube, because any weakness here will first be noticeable on the highest frequencies.

#### Band Spreading

*Can I use the "band spread" coil system on my National a.c. 45 short-wave receiver so as to make tuning easier?*

Band spreading consists of opening the tuning dial spaces so that the wave bands are farther apart so as to make tuning easier and not crowded with interfering stations. Coils of smaller range or tuning limits that do not cover wide wave bands, together with smaller variable condensers, open the crowding and widen the tuning spaces between stations on the dial. But, in order to cover the entire wave band from lower to higher limits, it is necessary to have several more coils than usually utilized.

National band-spread coils are made particularly for amateur reception on the 20, 40, 80 and 160 meter bands

which are so crowded with interfering operators. These coils have limits that range from just below to just above the wave lengths given above and will spread the amateurs over a large portion of the dial, some of them being as much as 50 points on the dial apart. These band spread coils are interchangeable with other plug-in coils in the National Thrill Box short wave receivers as well as some other types of short wave sets.

#### Using 6.3-Volt Tubes

*Can either -37 or -44 type tubes be used in the RADEX short-wave converter in place of the 56 and 58 types? My Philco 91 receiver uses the 6.3-volt tubes instead of the 2.5-volt types.*

The converter was designed particularly for the 2.5-volt tubes—56s and 58s. You may use it with a Philco 91 or any set having 6.3-volt tubes merely by inserting 1-ohm resistors in series with each of the two filament wires of the converter leading from the wafer adapter that is slipped beneath one of the 6.3-volt tubes in your receiver.

#### Power-Line Filter

*I am uncertain about winding the coils for the power line filtering device described in the April issue of RADEX. Is there a continuous wire laid in two layers or two separate layers with dead ends?*

Each tube has two layers wound on it with a single piece of wire, making up the full winding required. There will then be two ends to the length of wire. Start near the end of the tube and wind a layer of 100 turns evenly and smoothly, then return to the starting point after backwinding another 100 turns in the same direction—always away from you. One end of the coil connects to a plug prong of the plug used to attach to the 110-volt lighting socket; the other end connects to one hole of the outlet socket terminal used to receive the plug of the radio set cord. There are no dead or blank ends of the windings.

## Headphones on Zenith WH

Can I attach headphones to my Zenith, model WH, receiver and still retain the volume and tone as it now is? Also, how about using new tubes in this set?

See the February, 1933, issue of RADEX for information about using headphones. The original tone and volume will be retained in this way for weak signals. Since your receiver uses one power tube, a -47, you may attach the phones as shown in Figure 3, page 3, of the February issue of RADEX, following the arrangement indicated by the lower right-hand corner of the diagram.

If you do not care to break the speaker lead and insert a silencing switch, for all practicable purposes one of the headset adapters advertised in RADEX will give you all the volume you will need for headphone reception. It does not make use of the last stage, or the power tube.

## New Tubes and Noises

Nearby street cars cause much interference in my Majestic, model 52, receiver, and I wish to know whether new type tubes will help.

You can try a new 57 in place of the -24 first radio-frequency tube that is located first in the row of tubes, just in front of the -45 that is next to the -80. You will need a special adapter for this purpose. No other changes are recommended. But this will not decrease the street-car interference. That is picked up by the aerial, and a proper antenna location, shielding with a noise-reducing antenna, as described in the October, 1933, issue of RADEX, will be of value. Place your aerial itself as far from the street cars as may be possible; the length of lead-in wire when shielded will make little or no difference.

## Tubes Light; No Sound

My Philco set, model 513, seems to be dead although the tubes all light up. The old tubes have been replaced with new ones that are good. Can you help me?

We believe you have made an error in the model number; model 531 seems to be your receiver. First, we suspect the windings of the two audio-frequency transformers. The primary windings are likely to burn out, and they should be tested for conductivity with a battery and voltmeter. If no current passes, the transformer must be replaced. Test the speaker windings to see that no breaks in the wires are present. If the windings are o.k., we suggest that you take a pair of phones or a d.c. voltmeter and place one of the contacts on the chassis of the set and touch the other contact to each of the plate springs of the tube sockets with the set turned on and all the tubes, except the rectifier, removed. Each contact of the plates should give a reading or click in the phones. If a dead point is found then look for a defect in the resistor some place in the circuit leading to that particular plate contact. It is quite apparent that some plate circuit in the set is not getting the proper plate direct-current supply from the power system.

## Automatic Volume Control

I wish to have automatic volume control installed in my RCA model 80 receiver. Can this be done; if so will you tell me what to do? This set has a number of -24 tubes and I would like to replace them with 57s or 58s, if practicable.

The RCA 80 can be fitted with a.v.c. A 56 tube is necessary for this purpose, and it should be placed within the set at a convenient place close to the first intermediate-frequency tube. The grid return circuits of the first radio-frequency, the first intermediate-frequency, and the second intermediate-frequency tubes, are opened at the bottom of the coils connecting to the grid caps of those tubes, and fixed condensers of 0.1 mfd. capacity are inserted in series in the break in the circuit just made. Then three 250,000 ohms resistors are attached to these grid returns, at the bottom of the coils where the condensers were just at

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# The Short Wave Stations of North America

## Arranged by Frequencies

This list includes all the American transmitters except the United States Airways stations which were published in November. Readers are advised not to request verifications from any of the commercial stations listed below. The foreign S. W. Stations appeared in the January issue.

## United States and Possessions

Mega.	Meters				
1.534	195.45	KGHO, Des Moines, Iowa, State police	2.416	124.09	KGPB, Minneapolis, Minn., police
		WPGC, S. Schenectady, N.Y., State police			WPDS, St. Paul, Minn.
1.558	192.43	KGPD, San Francisco, Calif., Marine Fire	2.422	123.79	KGPE, Kansas City, Mo., police
		WEY, Boston, Mass., Marine Fire			KGPG, Vallejo, Calif.
		WKDT, Detroit, Mich., Marine Fire			KGZC, Topeka, Kans.
1.570	191.08	WPQE, Baton Rouge, La., police			KSW, Berkeley, Calif.
		WPEW, Northampton, Mass., police			WMJ, Buffalo, N. Y.
1.574	190.48	KGPY, Shreveport, La., police			WPDW, Washington, D. C.
		WMP, Framingham, Mass., State police			WPEK, New Orleans, La.
		WPEL, W. Bridgewater, Mass., police	2.430	123.45	WPFU, Portland, Me.
		WPEV, Portable in Mass.			KGZD, San Diego, Calif., police
		WRDS, E. Lansing, Mich., State police			KGZJ, Phoenix, Ariz.
1.596	187.85	WCF, New York, N. Y., police			WPDJ, Columbus, Ohio
		WRDU, Brooklyn, N. Y., police			WPDN, Dayton, Ohio
1.658	180.83	KSW, Berkeley, Calif., police			WPFH, Highland Park, Ill.
1.674	179.10	..... Harrisburg, Pa., State police			WPFK, Hackensack, N. J.
1.712	175.13	KGJX, Pasadena, Calif., police			WPGI, Portsmouth, Ohio
		KGPC, St. Louis, Mo.			..... Little Rock, Ark.
		KGPJ, Beaumont, Texas			..... Long Beach, Calif.
		KGPL, Los Angeles, Calif.			..... Minneapolis, Minn.
		KGPR, Fort Worth, Texas			..... Santa Ana, Calif.
		KGZB, Houston, Texas	2.442	122.77	KGPP, Portland, Ore., police
		KGZI, Wichita Falls, Texas			KGPX, Denver, Colo.
		KGZL, Shreveport, La.			KGZH, Klamath Falls, Ore.
		KGZQ, Waco, Texas			KGZR, Salem, Ore.
		KVP, Dallas, Texas			WMDZ, Indianapolis, Ind.
		WKDU, Cincinnati, Ohio			WPDE, Louisville, Ky.
		WPDB, Chicago, Ill.			WPDI, Flint, Mich.
		WPDC, Chicago, Ill.			WPDH, Richmond, Ind.
		WPDD, Chicago, Ill.			WPDJ, Lansing, Mich.
		WPDU, Pittsburgh, Pa.			WPEB, Grand Rapids, Mich.
		WPED, Arlington, Mass.			WPES, Saginaw, Mich.
		WPEH, Somerville, Mass.			WPFC, Muskegon, Mich.
		WPEI, E. Providence, R. I.			WPFE, Reading, Pa.
		WPEJ, Brookline, Mass.			WPFH, Jacksonville, Fla.
		WPEK, Lexington, Ky.			WFFT, Lakeland, Fla.
		WPFA, Newton, Mass.			WPFJ, Town of Palm Beach, Fla.
		WPFJ, Hammond, Ind.			WPFZ, Miami, Fla.
		WPFN, Fairhaven, Mass.			WPGA, Bay City, Mich.
		..... Providence, R. I.	2.450	122.40	..... Binghamton, N. Y.
		..... San Bernardino, Calif.			KGPH, Oklahoma City, Okla., police
2.414	124.20	KGPA, Seattle, Wash., police			KGPO, Tulsa, Okla.
		KGPS, Bakersfield, Calif.			KGPO, Honolulu, Hawaii
		KGZA, Fresno, Calif.			KGZP, Wichita, Kans.
		KGZM, El Paso, Texas			KGZF, Chanute, Kans.
		KGZN, Tacoma, Wash.			KGZP, Coffeyville, Kans.
		KGZO, Santa Barbara, Calif.			WPKK, Milwaukee, Wis.
		KGZV, Aberdeen, Wash.			WPEE, Brooklyn, N. Y.
		KGZX, Albuquerque, N. Mex.			WPEF, Bronx, N. Y.
		WCK, Detroit, Mich.	2.458	121.97	WPEG, New York, N. Y.
		WMO, Highland Park, Mich.			KGHS, Spokane, Wash., police
		WPDA, Tulare, Calif.			KGZW, Lubbock, Texas
		WPDJ, Passaic, N. J.			WPDG, Youngstown, Ohio
		WPDJ, Detroit, Mich.			WPDN, Auburn, N. Y.
		WPDY, Atlanta, Ga.			WPDO, Akron, Ohio
		WPFH, Baltimore, Md.			WPDH, Rochester, N. Y.
		WPFH, Columbus, Ga.			WPDV, Charlotte, N. C.
		WPFM, Birmingham, Ala.			WPEA, Syracuse, N. Y.
		WPFH, Clarksburg, W. Va.			WPFH, Asheville, N. C.
		WPFY, Yonkers, N. Y.			WPGD, Rockford, Ill.
		WPGH, Port Huron, Mich.			WRBH, Cleveland, Ohio
		WPGJ, Utica, N. Y.	2.470	121.40	KGZO, Cedar Rapids, Iowa, police
		WPGS, Mineola, N. Y.			KGPD, San Francisco, Calif.
		WRDR, Grosse Pointe, Mich.			KGPI, Omaha, Neb.
		..... La Grange, Ga.			KGPK, Sioux City, Iowa
		..... Santa Fe, N. Mex.			KGPM, San Jose, Calif.

(Continued on page 94)



# REALLOCATION in Europe

Grand Shift on January 15

THE "Plan de Lucerne" which resulted from the conference in that city in May of the present year, went into effect on January 15, 1934. This Plan was signed by 27 European states. Seven countries—Finland, Greece, Holland, Hungary, Lithuania, Poland and Sweden—did not sign the Convention at the time but it is generally felt that they too will be guided by the new arrangement.

The Plan covers 232 stations which are allotted 130 channels of which 55 are exclusive while the remainder are shared. Roughly, those stations allotted frequencies between 1500 and 1250 kcs. are given a maximum power of 30 kw. Between 1250 and 1100, the maximum is 60 kw. Between 1100 and 550, 100 kw. For frequencies below 300 kcs the maximum is 150 kw. with the exception of Moscow-1 which has 500 kw.

Only a few of the more important stations with their new frequencies can be given here. The complete list of stations with their revised wavelength will appear in the January-February-March issue of the DX Log of the World. While many of the stations will not at first be found with the higher power to which they are entitled, many countries, notably Germany and France, are preparing to transmit on these higher powers.

The interesting notes regarding the stations given here, were sent us by an English reader, W. H. Turner, 144 Parrswood Road, N., Withington, Manchester. Times mentioned are G. M. T.

## Long Wave Stations

Huizen and Hilversum, 223 and 995

The power of Hilversum is raised to 20 k.w. from 5-40 p.m., and that of Huizen to 50 k.w. from 3-40 p.m. daily, the latter transmission being from the new Government station at Kootwyk. These two stations change wavelengths every three months, i. e., in January, April, July and October.

Radio Paris, 75 k.w., 167

A favorite French station for British listeners. In January it becomes the French long-wave National station, with a power of 100 kilowatts. Provision is being made for a further increase to 150 k.w. if required.

Berlin (Deutschlandsender), 60 k. w., 191

This German long-wave station (formerly Zeezen) has now its own programmes, and also relays concerts and other features from other cities. Its power is to be raised to 150 kilowatts in January.

Eiffel Tower (Paris), 13 k.w.

One of the first European broadcasters, this station will close down in January, being afterwards used for Government and commercial transmissions.

Warsaw (Poland), 120 k.w., 230

First European station to use over 100 k.w. Has high-class concerts and frequent transmissions of Chopin pianoforte music. It is announced as "Varshava."

Motala (Sweden), 30 k.w., 216

Relays the Stockholm programmes and takes concerts occasionally from Goteborg and Horby.

Radio Luxembourg, 200 k.w., 1249

May not accept low wavelength allotted under Lucerne plan. Broadcasts sponsored programmes, varied by gramophone and other music.

Kalundborg (Denmark), 30 k.w., 238

Recently raised from 7 k.w., and is now a favourite day and night station in this country. Relays Copenhagen.

Monte Ceneri (Switzerland), 15 k.w., 126.8

A new Swiss station designed to serve the Italian-speaking population of the country. Announces frequently in Italian, and relays Italian opera.

Oslo (Norway), 60 k.w., 253

Gives an orchestral concert every night, and also features instrumental music.

## BROADCAST BAND

Budapest (Hungary) 18.5 k.w., 546

Is just within tuning range of majority of receivers. Announces "Hallo, Hier Radio Budapest!" frequently, and is easily recognized by its unique instrumental music.

Munich (Germany), 60 k.w., 740

This main German station may shortly increase its power to 100 k.w. Provides many of its own programmes, and is relayed by Augsburg and Nurnberg.

Vienna (Austria), 100 k.w., 592

Has recently increased its power. Broadcasts many popular orchestral programmes, including the waltzes of Strauss and other Viennese composers.

Brussels No. 1 (Belgium), 15 k.w., 620

Provides continuous orchestral music from eight to ten almost every evening. Announces

ments are made only in French, its sister station being reserved for Flemish listeners.

Prague (Czecho-Slovakia), 120 k.w., 638

Broadcasts first-class orchestral, military band, string and pianoforte music, and frequently relays grand opera.

Lyons (France), 1½ k.w., 648

Though of very small power is often well received in this country. Plans to go up to 60 k.w. in near future.

Langenburg (Germany) 60 k.w., 658

Will shortly raise its power to 100 k.w. Will be less than 7 metres from North Regional in January, but fortunately has an exclusive wavelength.

Beromunster (Switzerland), 60 k.w., 556

"On the air" at 5-50 a.m. daily with music for gymnastic exercises. Relays the best of the Berne, Basle, and Zurich programmes.

Rome (Italy), 50 k.w., 713

Famous for opera and orchestral broadcasts, which are relayed by the 25.4 metres transmitter and Milan and Naples.

Stockholm (Sweden), 55 k.w., 704

Often broadcasts old English dance music, and gives prominence to popular orchestral, string, and instrumental music.

Madrid (Spain), 2 k.w.

Often transmits until well into the morning hours and, in spite of its low rating and great distance, comes over at good volume when other stations have closed down.

Funkstunde (Berlin), 1.5 k.w., 841

German National station, replacing Witzleben. Will transmit on 60 k.w. when changing wavelength.

Athlone (Irish Free State) 60 k.w., 565

An established favourite with many listeners, and one of the strongest outside stations received in the north of England. Will be outside the wavelength range of many receivers in January, but can be brought in by a small condenser across aerial and earth.

Katowice (Poland), 16 k.w., 758

Has a large following owing to their Radio Club including so many British listeners. Many of these are replied to over the ether.

Sottens (Switzerland), 25 k.w., 677

Takes its programmes from Lausanne and Geneva, and gives occasional relays from Eiffel Tower and Strasbourg.

Leipzig (Germany), 120 k.w., 785

One of Germany's most powerful stations, famous for orchestral concerts by the Leipzig Symphony and Dresden Orchestras, and also its frequent transmission of old and new dances.

Toulouse (France), 8 k.w., 776

Popular station with British listeners on account of its short and bright programmes, many of which only last fifteen minutes, and rarely exceeding half an hour. Will shortly raise its power to 60 k.w.

Hamburg (Germany), 1.5 k.w., 776

One of the lowest-powered German stations regularly received in this country. Will shortly increase its power to 100 k.w. under the German reorganization scheme.

Stuttgart (Germany), 60 k.w., 576

Another station which will shortly increase its power to 100 k.w. On its new wavelength it should be one of the best German stations received in this country.

Barcelona EAJ1 (Spain), 8 k. w.

Gives very little original orchestral music, mostly using gramophone records. Occasionally broadcasts plays, and gives tango dance music after midnight.

Strasbourg (France), 11.5 k.w., 859

Gives an orchestral concert at 5 p. m. daily, and probably broadcasts more orchestral, trio and string quartet music than any other European station.

Brno (Czecho-Slovakia), 35 k.w., 922

Relays the best of the Prague programme items. Announcements are made in Czech, German, French, and English.

Brussels No. 2 (Belgium), 15 k.w., 932

Broadcasts excellent orchestral music. A two-hour concert at noon, and another of the same length figure in the programmes almost every day.

Milan (Italy), 50 k.w., 814

A powerful Italian relay station taking the majority of its programmes from Turin. Relayed also by Genoa, Trieste, and Florence.

Post-Parisian, 60 k.w., 959

Is "on the air" at 7-10 a. m., and gives bright and varied programmes for sixteen hours daily. Is one of the few foreigners on the broadcast band receivable at good strength in daylight.

Breslau (Germany), 60 k.w., 950

Comes on the air at 5 a. m., and continues with music and talks until nearly midnight. The talks are often of a scientific nature, dealing with astrology, astronomy, everyday science, and a weekly talk on wireless.

Genoa (Italy), 10 k.w., 986

A medium-power station, working in conjunction with Milan, Turin, Trieste, and Florence.

Bordeaux-Lafayette, 13 k.w., 1077

One of the French Government stations, relaying programmes from Eiffel Tower and Grenoble, Lyons and Strasbourg.

Hilversum and Huizen, 8.5 k.w., 995-223

The power of Hilversum is increased to 20 k.w. from 5-40 p. m., and that of Huizen to 50 k.w. from 3-40 p. m. daily. These stations change wave-lengths in January, April, July and October.

Lisbon (Portugal), 20 k.w., 629

A new station just beginning its tests. Can be easily located between Heilsberg and Hilversum. Call sign, Radio Lisbon.

Heilsberg (Germany), 60 k.w., 1031

Transmissions from 5-15 a. m., and features concerts by the Konisberg Opera House and Dresden Symphony Orchestras.

Turin (Italy), 7 k.w., 1140

Small power but important Italian station. Gives relays of opera, which are taken by Milan, Genoa, Trieste, and Florence.

Moravská-Ostrava (Cz.), 11 k.w., 1158

Comes on the air at 5-15 a. m. Gives its own afternoon concerts, afterwards relaying the Prague programme.

(Continued on page 48)

## Condensed CREAM of the DX Reports

**F**ROM a Californian, Jack Watrous, 113 North Orange St., Los Angeles: "I am using a Zenith all-wave, 9-tube and have received 199 stations on the b. c. b. Some of my best are 2YA, WCLO, WMBH, KFPL, and numerous Japs. I have just erected a new aerial about 70 feet long and am using the ground described in the October RADEX and find that it helps in pulling in the 100-watters. For the benefit of those who want Oregon, KALE is on from midnight to one each Sunday morning with an organ program. The RADEX Time Converter is marvelous; how I did without it is more than I can see?" Jack wants to join a Coast DX Club.

"Last Columbus Day, I purchased my first RADEX and that evening I started to do a bit of DXing," reports Walter C. Birch, 189 Essex Street, Lynn, Mass. "To date I have logged 361 stations. I have every station of 5000 watts and over on the continent except WOI and WCB. I have every state but Wyoming and every province in Canada. I use an RCA-Victor 10-tube biacoustic super, Model R-90 and I would like to hear from others using a similar set. To me it is unbeatable for tone quality and as to selectivity, I am able to bring in a station on every channel at 6:45 p. m."

"Here is our record on a Midwest 16-tube all-wave set," submits R. W. Putnam, 1857 Nelson Ave., Grand Rapids, Mich. "Amateurs whose call, city and state were distinctly heard, 275; stations on the b. c. band, including 44 states, Cuba, Mexico and Canada, 267; weather stations 13; short wave, foreign and U. S., 43; police 66; a total of 664. This was all in six weeks." Among his short wave catches, Mr. Putnam lists: PRADO, JTS, JW9, HJ5ABF, HJ5ABB, LSN-X, PSF, YV1BC, YVR, XETE, VK3ME, VE9GW, EAQ, GSA-B-D, DJA-D.

"My log has grown to 475 thanks to the DX calendar," says Lloyd Harrison, 130, S. Hague Ave., Columbus, Ohio. "I have verified only 50 as I have just started to verify in earnest but even now verify only what I consider extra good catches, 250 watts or under and over 1000 miles. Have every state but Wyoming and all channels. I think the FRC checks are a snap especially for beginners building a log. I would like to get in touch with someone who has the same set as mine, a McMillan 9-tube superhet."

"Have you any information on the Cuban station on 1030 kcs.?" asks Earl R. Roberts, 42 Burt Ave., Newark, Ohio. "I heard it Monday night (Dec. 18) and the call in Spanish sounded like CMVT or CMBT and the city almost like Havana but more like LaHavana. It came in with good volume. CKCR on 1510 comes in very well. LR4 seems to be on about 992 instead of 990. HIX was received about 598 instead of 579. It was quite weak. XEAE on 980 has been coming in fine lately until three a. m. or later."

"What is the address of Poste-Parisian," asks Robert Hough, 26 Ellenton Ave., New Rochelle, N. Y. "At present I have 624 stations, my latest being KIEM, KGIW, KIDW, KFPL, KGFI and KFXJ which I tried for for a year. Other good catches were XEFV, CMQ, CMCD, YV1BC and YV3BC. Poste-Parisian came in Nov. 24, 25 and 27. They seem to be on every morning except Sunday. They come on at 2:12 a. m. on the dot with good volume. At 2:30 they start to fade and by 2:58 they are gone."

"I once noted in RADEX a fellow with a log of over 200 and no T-Ps," says Ernest Ball, 39 Delaware Ave., Ottawa, Ont. "My record is worse than that. I have over 550 logged with no T-Ps, not even KGU. However, I have P-P, VONF, LR5, HJN, YV1BC, HIX, WKAQ and CMCW. In the low power I have two 10-watters, VE9EK and WHBC, two 15-

watters, 10-AK and 10-BQ, two 25s, WIBG and 10-BP. Have all the states and all the provinces but one each."

"My log of stations heard has increased to 715 with 552 verified and letters out to LR5, CX26, KGU, KGBU and Poste-Parisian," writes Lloyd S. Hahn, P. R. R. Y. M. C. A., New York City. "I heeded the admonition to clean up my set contained in the article in the November RADEX. When I removed the shield around the condensers I found a mouse so dead that it crumbled. It had evidently gotten in there when the set stood in the salesroom."

Writes Donald W. Shields, Roseville, Ohio, "I have 318 stations on the regular b. c. band with every state in the union except Delaware. My best are HJN, LR5, KVOA, KMPC, KTM, KFSG, KFVD, KGEK, KPOF, KGCX, KOH, KEX, KJR, KOMO and KGA. On the s. w. I have VK2-3ME, GSD-B-F, GCB, GBS, DENNE, EAQ, VE9GW, HJB, CGA, ZFB, LSN and LSX. I have a Philco 16-B 11-tube, all-wave. Would like to hear from other owners of that model."

"I have been DXing but a few months but my scrapbook of verifications is growing," writes George Butts, 2 Beach Drive, Medina, N. Y. "I have received every station of 5000 watts and over in the U. S., except KOB. I have veries from HJN and VE9EK. My log stands at 342. My best catch in the U. S. is that 25-watter in Los Angeles, KFVD. I use a Sonora, Model A31. Would like to hear from others using this set."

"I have been DXing since 1931 and now have logged 443 stations," summarizes John L. Taggart, Jr., 19 Robie Street, Bath, N. Y. "My best are YV1BC, LR5, HJN, KGIR, WKAQ, FQN, KALE, KVOA, KGHL and several other 100-watters. I have a Majestic, Model 92, and it sure has a good wallop for an old-timer." John is a member of the National Radio Club and would like to hear

from DXers anywhere.

"After six months, my log shows 226 stations," says Grant Ricksecker, 1318 West 111th St., Cleveland. "I lack six states; Kentucky is the only complete state but have had four out of five in West Virginia and 17 of 20 in Ohio. I have 10 in California, 3 in Oregon and 3 in Washington, making 16 on the west coast. In Chicago I have 12 out of 14 and in New York City 11 out of 15."

"I have a 5-tube, 75 to 550 meter Simplex Model P," contributes Stanley Mattheson, R. 1, Box 14, Stafford Springs, Conn. "I have received 176 stations between 540 and 1500 kcs. About the first night I had the set, I tuned in KFI. On the s. w. I have 30 police stations. I have listened to airport stations hours on end but have never heard one of them announce his call letters."

"The only book worth having on the radio" is the compliment of Marvin D. Dixon, Ora Mill R. 74, Shelby, N. C., who now has around 600 stations on his log. He is proud of 10-AK, BI, BQ and BP, CKIC, KFPM, HJN, CX18, CX26, LR5, 2CO, 2B1, 2YA and KGU. His set is a Philco 11-tube Model 15-X and his aerial 350 feet long and 40 feet high. He would like to correspond with DXers.

"Have logged about 225 stations on the b. c. band and about 30 on s. w.," adds up C. Ray Trask, 3475 West 22nd Ave., Vancouver, B. C. "I hear EAQ quite regularly. My best catches are 2YA, VK2ME, GSD-E, DJD, RV15, YV3BC, VE9HX and six Japs. I use an RCA Radiola 60 with a Sparton s. w. converter. Glad to hear from any DXers and will answer all letters."

"Look at this record," proclaims Harold J. Curran, Box 75, Wappinger's Falls, N. Y. "A grand total of 616 stations, 212 of them being 100-watt or less. Every station in the Union verified. Among them HIX, RUS, LR5, FQN and my best of all, 2YA. All these stations were heard on an Atwater Kent Model 55.

Would like to hear from others using this model."

"In one month, with my 8-tube Radiola 60 superheterodyne, I have logged 150 stations," reports "A New DXer," F. Britton Buser, Cambridge City, Ind. "I find I have been missing a lot in not verifying my catches. I intend to start right away. Among my best are WENC, WGNV, KMO, WSPA, KFVD, KGH, WNBO, KGFG and KARK."

"I received an Emerson 4-tube radio one year ago today," recalls S. W. Sullivan, 114 So. Kenilworth, Oak Park, Ill. "In that time I have logged 419 stations on the b. c. band—20 Californians, 15 Canadians, 6 Mexicans and two Cubans. I consider CMCW, KXA, and 10-BP my best. Would like to hear from other owners of Emersons."

"I have increased my log to 287 stations," says Foster Allen, 115 N. College St., Martinsburg, W. Va. "I have just started sending for veries in the last two weeks. Fourteen of my stations are on the Pacific Coast. I have trouble receiving any Cubans. I have a Model 801 Stewart-Warner receiver."

"I have received about 20 Japanese stations already this winter although radio reception is said to be poor in Victoria because of the large amount of cloudiness and rain we have here," reports W. Pollard, 60 San Juan Ave., Victoria, B. C. "I have also received KZRM, 2CO, 3AR, 3LO, 5CK, 2FC, 2BI, 2GB, 2UE, 4RK, 4BC and 4QG."

Donald W. Reynolds, 34 Chambers St., Newburgh, N. Y., submits this report: "My log is now 497. This morning, Dec. 28, four T-Ps rolled in—2YA, 5CL, 4GQ and JOIK. I have all the states but Wyoming and at least one station on every continent except Africa. I heard LR5 with good volume."

"My DX record is nothing to brag about," thinks Anthony Misunas, 319 Grand Ave., Rockford, Ill. "Last year and this, I have compiled a list

of 410 stations with my best: CMCY, KGU, 10-AB and BQ, CKOV, XEFV, KGBU, CMDE and XEJ. Am still hoping for T-Ps. I have a Stewart-Warner, 9-tube set."

Writes Adam Gretchen, 1593 East 45th St., Cleveland: "My log totals 576 including 20 police. Have any readers received T-Ps on Atwater Kent receivers? My best catch was Poste-Parisian which I heard on three successive mornings last winter but have not heard them since."

From Manchester, England, W. H. Turner writes: "I am listening to your stations nightly. I have had WEA, WCAU, WTAM, WTIC, WPG, WBZ, WABC, WIOD, KMOX, WRVA and my best, I think was today, Dec. 15, WOAI San Antonio. My best program, I think, is Friday night with Pond's Drama."

"My set is a Philco bought about six weeks ago," says Wilbur Cadmus, R. D. 1, Millville, N. J. "I already have 250 stations including LR5 in Buenos Aires."

"I have a 5-tube Cosmopolitan and would like to hear from others with the same set." Guilford W. Hamilton, 112 Orchard Ave., Punxsutawney, Pa.

"Since last April I have logged 323 stations. My best: CMQ, XEN, KGKO, KFJB, KMLB and WIBG." H. Searles, 349 Broadway, Rochester, N. Y.

"Here are five I value a good deal," submits Harry M. Gordon, 317 East 10th St., Erie, Pa. "They are 5CK, Crystal Brook, Australia, KGW, Honolulu, 2CO, Corowa, Australia, 4QG, Brisbane, Australia, and 2BL, Sydney. I had 4QG five straight mornings before I found out who they were, so when I wrote to them I gave the five days' log. I think that is as nice a catch as a person can get."

"I, too, hear the outlaw, WWSP," remarks Bernard E. Lorch, 8360 Ohio Ave., Glassport, Pa. "They seem to have no definite time on the air but when they announce it is 'WWSP, South Hills, Pittsburgh.' I get them at 820 kcs."

# The LONG WAVE STATIONS

The Channels from 18 kcs. to 536 kcs.

Frequencies are shown in Kilocycles and wavelengths in meters. The symbols in the fourth column represent the type of service, as follows:

Kcs.	Meters	Call	Type	Location	266.00	1,127.14	KCAI	AW.	Waynoka, Okla.
18.00	16,656.67	KIE	Exp.	Kahuku, Hawaii			KCX	AW.	Medford, Ore.
18.22	16,455.54	WQK	Exp.	Rocky Point, N. Y.			WHZ	AW.	Atlanta, Ga.
18.60	16,118.27	KGI	Exp.	Kahuku, Hawaii			WSX	AW.	Boston, Mass.
45 to 75	6,662.67 to 3,997.60	W2XA	Exp.	Rocky Point, N. Y.			WWAB	AW.	Buffalo, N. Y.
50 to 70	5,996.40 to 4,283.14	W1XR	Exp. tAt	Houlton, Me.	269.00	1,114.57	RW58	B.	Moscow (Popoff), USSR.
50 to 75	5,996.40 to 3,997.60	W1XQ	Exp. tAt	Bradley, Me.	271.50	1,104.29	RV10	B.	Minsk Kolodistchi, USSR.
66.5 to 89.5	4,508.57 to 3,313.95	WOH	tAt	Bradley, Me.	272.00	1,102.28	WWX	AW.	Washington, D. C.
155.00	1,934.32	.....	B.	Kaunas, Lithuania	277.00	1,082.38	W2XAH	AW.	Oslo, Norway
160.00	1,873.87	.....	B.	Huizen, Holland	278.00	1,078.48	W3XR	Exp.	S. Plainfield, N. J.
167.00	1,795.32	.....	B.	Radio-Kootwijk, Holland			W3XY	Exp.	Mendham, N. J.
170.00	1,763.54	WQM	.....	Lahti, Finland	280.00	1,070.78	W8XAA	AE.	Mendham, N. J.
170.00	1,763.54	.....	B.	Rocky Point, N. Y.			.....	B.	Cleveland, Ohio
174.00	1,723.10	.....	B.	Radio-Paris, France			.....	B.	Seheveningen, Holland
183.50	1,633.89	.....	B.	Deutschlandsender, Germany	284.00	1,055.70	KCAC	AW.	Tiflis, USSR.
188.00	1,594.78	RW14	B.	Irkutsk, USSR.			KCT	AW.	Butte, Mont.
190.00	1,578.00	WBA	P.	Harrisburg, Pa.			KCY	AW.	Los Angeles, Calif.
		WBR	P.	Butler, Pa.			KVM	AW.	Portland, Ore.
		WDX	P.	Wyoming, Pa.			WWQ	AW.	North Platte, Neb.
		WJL	P.	Greensburg, Pa.			KCQ	AW.	Bellefonte, Pa.
		WMB	P.	W. Reading, Pa.	290.00	1,033.86	KGQ	AW.	St. Louis, Mo.
193.00	1,553.47	.....	B.	Davenport National, England			RV9	B.	Salt Lake City, Utah
195.00	1,537.53	.....	B.	Ankara, Turkey			KCAA	B.	Kiev, USSR.
202.50	1,480.59	RW1	B.	Moscow (Komin-tern), USSR.	296.00	1,012.90	KCAF	AW.	Tulsa, Okla.
207.50	1,444.91	.....	B.	Eliff Tower, Paris, France			RW53	AW.	Albuquerque, N. M.
212.50	1,410.91	.....	B.	Warsaw No. 1, Poland			KCAH	AW.	Leningrad, USSR.
217.50	1,378.48	RW76	B.	Novosibirsk, USSR			KCR	AW.	Kingman, Ariz.
222.50	1,347.50	.....	B.	Motala, Sweden			.....	AW.	Boise, Idaho
230.00	1,303.56	.....	B.	Moscow (Trades Union), USSR.			RW60	B.	Soro, Denmark
235.00	1,275.83	.....	B.	Kashah, Tunis			KJF	AW.	Alma Ata, USSR.
238.00	1,259.75	RW8	B.	Baku, USSR.			KJL	AW.	Omaha, Neb.
240.00	1,249.25	RW43	B.	Baku, USSR.			KJL	AW.	Eiko, Nev.
		.....	B.	Vienna Exp., Austria	320.00	936.93	KCS	AW.	Pasco, Wash.
242.00	1,238.92	.....	B.	Boden, Sweden			WRW	AW.	Greensboro, N. C.
248.00	1,209.35	WFT	AW.	Spartanburg, S. C.			WWAH	AW.	Albany, N. Y.
250.00	1,199.28	.....	B.	Istanbul, Turkey			WWAR	AW.	Jackson, Mich.
252.00	1,189.76	.....	B.	Reykjavik, Iceland			RW4	AW.	Khar'kov, USSR.
254.00	1,180.39	KLK	AW.	Luxembourg			KIS	AW.	Iowa City, Iowa
		WSG	AW.	Reno, Nevada			KSG	AW.	Cheyenne, Wyo.
		WWAP	AW.	La Crosse, Wis.			WWAU	AW.	Memphis, Tenn.
260.00	1,153.15	WNR	AW.	Pittsburg, Pa.			KCV	AW.	Oakland, Calif.
		.....	B.	Richmond, Va.			WEK	AW.	Wichita, Kans.
265.00	1,131.39	.....	B.	Kalundborg, Denmark			WWAS	AW.	Cincinnati, Ohio
		.....	B.	Monte Ceneri, Switzerland			WKDL	AW.	Miami, Fla.
		.....	B.	.....			RW19	B.	Achkhabad, USSR.
		.....	B.	.....			KCAD	AW.	Idaho Falls, Idaho
		.....	B.	.....			WBP	AW.	Key West, Fla.
		.....	B.	.....			WWAC	AW.	Nashville, Tenn.
		.....	B.	.....			WWU	AW.	New Brunswick, N. J.
		.....	B.	.....			KCU	AW.	Fresno, Calif.
		.....	B.	.....			KCZ	AW.	Seattle, Wash.
		.....	B.	.....			KRC	AW.	Kansas City, Mo.
		.....	B.	.....			WVO	AW.	Cleveland, Ohio
		.....	B.	.....			KCAE	AW.	Winslow, Ariz.
		.....	B.	.....			KDA	AW.	Maywood, Ill.
		.....	B.	.....			KDN	AW.	Rock Springs, Wyo.
		.....	B.	.....			KKJ	AW.	Fort Worth, Texas
		.....	B.	.....			RW70	B.	Leningrad, USSR.
		.....	B.	.....			.....	B.	Budapest No. 2, Hungary
		.....	B.	.....			RV5	B.	Sverdlovsk, USSR
		.....	B.	.....			RW9	B.	Kiev, USSR.
		.....	B.	.....			WAEF	AW.	Newark, N. J.
		.....	B.	.....			WHG	AW.	Columbus, Ohio
		.....	B.	.....			WQDQ	AW.	Dearborn, Mich.
		.....	B.	.....			RA8	B.	Bogorodsk, USSR.
		.....	B.	.....			WAEF	AW.	Newark, N. J.
		.....	B.	.....			WHM	AW.	Indianapolis, Ind.
		.....	B.	.....			.....	B.	Geneva, Switzerland



402.00	745.82	.....	B.	Ostersund, Sweden
406.00	738.47	KOG	A...	Honolulu, Hawaii
414.00	724.20	WAEF	A.	Newark, N. J.
		WCQ	A.	Lansing, Ill.
		WKDL	A.	Miami, Fla.
416.60	719.70	.....	Exp.	Moscow, USSR.
420.00	713.85	WAEF	A.	Newark, N. J.
434.70	689.71	.....	B.	Oulu, Uleaborg, Finland
435.00	689.24	RW35	B.	Astrakhan, USSR.
438.00	684.52	WPK	HP.	New York, N. Y.
442.00	678.32	KHL	IP.	Wailuku, Hawaii
		KHM	IP.	Lihue, Hawaii
		KHN	IP.	Lanai, Hawaii
		KHO	IP.	Kaunakakai, Hawaii
		KLN	IP.	Hilo, Hawaii
500.00	599.64	WKDL	A.	Miami, Fla.
511.00	586.73	WPK	HP.	New York, N. Y.
		RW30	B.	Dnepropetrovsk, USSR.
515.00	582.17	.....	B.	Tartu, Estonia
521.00	575.47	RA34	B.	Koursk, USSR.
522.00	574.36	.....	B.	Hamar, Norway
		.....	B.	Ljubljana, Yugoslavia
526.00	570.00	.....	B.	Grenoble (PTT), France
527.00	568.91	.....	B.	Freiburg-im-Breisgau, Germany
530.00	565.60	.....	B.	Wilno, Poland
536.00	559.36	.....	B.	Augsburg, Germany
		.....	B.	Kaiserslautern, Germany
		.....	B.	Tampere, Finland

## The Verification PROBLEM

**O**BVIOUSLY if reports coming in to the radio stations from listeners, are to do the stations any good they should contain some information of value to the station. While some stations might desire different information from others, it would seem that it would be of mutual benefit to the broadcasters and to the listeners-in if some uniform form of report were devised and published in your magazine either regularly or on frequent occasions. Then novices in DX work might get started without delay and with the greatest efficiency. I have just received a new Atwater Kent with short wave stage and was so interested in the possibilities of DX after reading your magazine that I have decided to see what I can do in that line during the coming winter. You folks who publish the magazine have been working so long that you are away down in its intricacies by this time but you should not lose sight of the fact that there

are beginners starting in after you all the time and you could materially assist them." This pertinent letter comes from Chester E. Ross, Hollister, California.

The points Mr. Ross makes seem to be very well taken. Surely a uniform report of reception would make it easier for the stations and save them from wading through long and rambling letters. Secondly, if stations are to continue to verify they must receive as well as give and listeners must learn how to give intelligible and helpful reports of the quality of reception. It seems to us, therefore, that it might be better—instead of publishing a model form of report—for us to provide a supply of printed forms which our readers could secure at a reasonable price. On these forms we might print a personal word from this magazine to the broadcasters urging them to make prompt verification if justified. We might point out the fact that many of the reports made are in competition and hence a matter of the utmost importance to the listener.

### Defends Stations

George W. Haskell, Box 58, South Paris, Maine, points out: "We often hear complaints in regard to radio stations not answering requests for verification. Considering the amount of correspondence which reaches a station, it doesn't surprise me that some letters get laid by and remain unanswered for some time. In praise of the stations, I wish to say that I have sent for verifications to 235 stations in a little over one year and have received replies from 233. The other two were written but a few days ago and it is hardly time for a reply. I think a respectfully worded letter, with a little patience if it is not answered at once, with a second letter after a reasonable time just as respectfully worded, will bring results every time provided due care has been exercised to give a complete report of the program heard. This has been my experience and I

would recommend this course to others."

Another point is stressed by Francis Eugene Andrew, 104 North 19th Street, Wheeling, W. Va. "The 24-hour mailing rule enforced by many stations should be impressed upon the minds of new (and some old) Radexers. Failure to obey this rule is one of the chief reasons why many reports reach 'ye old ash-can.' The readability code, etc., should be given on every message sent to a station. Local conditions, interference and any other information one might think the station engineer would appreciate, should be included in reports. If this is done, I feel certain that he will look upon DX letters as more of a necessity than as a bother. Merely giving selections or announcements does not help a station nearly so much as stating under what conditions those selections or announcements were heard."

### Too Much Dedication?

Still another phase of the problem is discussed by Abe Cohen, of the Library Department of the Seattle Post-Intelligencer. "I was on the Courtesy Programs Committee of the Transcontinental DX Club and it has puzzled me from time to time how the stations were able to comply with these incessant requests from radio clubs and still maintain as decent a front to DXers as they do. The selfishness of these DXers (and I have been just as bad as anyone else). 'We just *have* to have a program dedicated to *our* club.' No matter that the club has only twelve members—two of whom will stay up to listen to the broadcast—we must have the program dedicated to us. Personally I think all soliciting of stations by clubs should stop. The DX programs ought to be available to all and not just to *our* members. The suggestion may be a trifle radical but I feel that it is the only way DXing can be saved for the future."

The injustice of blacklisting or even condemning stations for a failure to

verify based upon individual experiences, is pointed out by W. T. R. Morris, Jr., 3219 Garland Ave., Richmond, Va. "In your December issue Harry McPoyle of West Philadelphia, complained about WTFI of Athens, Ga., saying that it was the worst offender in the matter of failure to verify. On the other hand, I received one of my very best verifications from this station. They sent me not only a verification card and a souvenir card but wrote me a personal letter in which they said: 'We are always extremely glad to hear from our friends regardless of where they are located but this letter of yours meant quite a great deal to us, especially the information you gave as to the clarity and quality of our station. Keep in touch with us; we will always be glad to hear from you; it takes just such letters as yours to help us make a success of our station.' I am afraid Mr. McPoyle did not give them the valuable information which *all* stations desire. Clarity, Quality, Fading and Volume are the main things to check on any station that the listener expects to receive a verification from."

Station WBTM, too, objects to being included in Mr. McPoyle's complaint. A good letter from W. P. Heffernan, Program Director of WBTM, states: "It is not true that this station ignores DX mail. During the first few months of this station's operation, more than three and one-half years ago, much fan mail was not answered; due to the press of business and the fact that the station was understaffed. However, when the undersigned took this desk over, he personally saw to it that all back mail, which was carefully filed, by the way, was answered.

"This station has never sold ekko stamps—has never asked for dimes and has certainly never 'collected dimes.'"

"May I state here that station WBTM is glad to hear from its listeners always, particularly on DX broadcasts, of which we have very

few and on our regular frequency check programs. I am sure that I echo the sentiments of the broadcasting industry, when I call attention of your readers to the fact that postage, particularly to a small station, is a very heavy burden and it is greatly appreciated whenever a return stamp or self addressed stamped envelope is included in the report of reception.

"It might be well to state here, that many so-called reports of reception do not give sufficient information to justify the station's verifying same. And a great many letters come in so many weeks behind the date of broadcast that we cannot help thinking, at least, that the writer obtained his 'dope' from some friend with whom he is swapping stations for their logs. If this is the case, the practice should be discouraged."

## Radio vs Fishing

**R**ADIO never fails to surprise and delight me. When younger, I fished a great deal. DXing supplies thrills fully equal to the older sport. When a distant station or a low-powered one first begins to come in, the sensation is as pleasurable as the first tug at the line. Then, manipulating the controls, power, volume, etc., until the call letters come in clearly and distinctly, is equal to the landing process and requires just as much skill and often more patience.

Before I new about DX, I often sat up nights and cruised about the radio dial. I carefully logged the stations heard until I had 207. With a new receiver, I raised my log to 300 but this seemed to be about the limit at the time. Then I heard of the DX clubs and decided to devote still more effort. I purchased a Philco, 111, 11-tubes, and settled down to DXing in earnest. That was more than two years ago. My log now stands at 709. Everyone of these stations has been heard on the loudspeaker and on the regular b. c. band. I have not veri-

fied but I have never logged a station until I had heard the call letters, the location and often the frequency distinctly. When all this checks with the latest copy of RAdex, I need no verification. Of course I heard many stations that I was not able to identify. The only duplications are those stations which materially changed their location, their frequency or decreased their power.

*Chas. C. Mann, Science Teacher,  
David Worth Dennis Junior High  
School, Richmond, Ind.*

## EUROPEAN Reallocation

*(Continued from page 39)*

**Frankfurt (Germany), 17 k.w., 1195**

Supplies many concerts and programme items to the more powerful German stations. The Frankfurt Symphony Orchestra is one of the best in Europe.

**Trieste (Italy), 10 k.w., 1222**

Received at tremendous strength at times. Transmits its own programmes from early morning until early evening, afterwards relaying those of Turin and Milan.

**Fecamp (France), 10 k.w., 1456-1393**

A French station with a great following in this country. Special daily transmissions from 11 p. m. to 3 a. m. with announcements in English and French.

Note: Slight errors may be found as the frequencies given above were converted from meters. For the correct frequencies see the new issue of the DK Log of the World.

## On KNOWING HOW

**I**HAD a very interesting experience this morning," narrates Richard M. Carter, 820 McKinley Ave., Ann Arbor, Mich. "A friend of mine purchased an Airline receiver with Stewart-Warner converter a few weeks ago. He hadn't been able to pull in VK2ME or 3ME or any foreigners on the regular b. c. band. Knowing of my success, he asked me to come over and give his dials a few twirls. I made no promises especially since it was raining here and seemed

like a poor morning for reception. I arrived at his house at 1:30 this morning and immediately proceeded to pull in VK2ME—not loud but perfectly clear. I then pulled in two 100-watters in California—KDB and KERN, and one in Rhode Island, WPRO, all with plenty of volume.

"A few minutes before two I turned to 830 and waited for KOA to sign off. Before the announcer finished speaking, we heard a voice in the background say 'Buenos Aires.' And then for an hour we listened to LR5. It came in QSA 4 to 5, R6 to 7. Not bad. I then picked up CJCA and CHGS and several faint signals which I insisted were 2CO, 5CK, KGU, 4QG, and 2BL. My friend didn't take much stock in my theories about these and was on his way to bed when I called him back to hear 2BL come in with room-filling volume. And they announced plainly right at that time. I wouldn't be that lucky again in a hundred years."

## Last-Minute NOTES

*(Continued from page 14)*

way between Moose Jaw and Regina and scrapped our old 500-watt CJRM machine. VE9JR is still operating on 25.6 meters but only in the evenings. VE9CL on 48.58 is not in operation at present but we expect to have it going simultaneously with VE9JR in the near future. We shall shortly open a new 100-watt transmitter in Winnipeg and this will operate on a frequency of 1390 kcs."

### B. C. Band Widened

Widening of the broadcast band to embrace three new channels in the 1500-1600 kc. band was announced by the Radio Commission Dec. 19, with an indication that a dozen stations of not more than 1000 watts will be licensed for operation on these waves under rigid limitations but with full authority to broadcast commercial

programs. The channels designated are 1530, 1550 and 1570 kc., each 20 kc. wide instead of ten. This is about the only tangible result coming out of the late-lamented Mexico City conference. Further details regarding this new move will appear in later issues of this magazine.

## A DX Calendar for 1500 Channel

"Am sending you a copy of the 1500 kc. schedule for the month of February that we have arranged," writes Fred W. Janssen, of the CPC of the NNRC, 220 South Santa Cruz St., Venura, Calif. "Would appreciate it very much if you would cooperate with us for February and not ask any of the 1500-kc. stations to come on so that they might conflict with this schedule. It would be mighty nice for everyone if we could get the cooperation of all the clubs in putting this schedule over." We think this an excellent idea and hope that the stations invited to participate will do so. In view of the fact that they have not as yet accepted as we go to press, we deem it best to publish this calendar separately. Time is in EST.

Thursday Morning, Feb. 8  
3:00-4:00 WSYB, Rutland, Vt.  
Friday Morning, Feb. 9  
3:00-4:00 CRCS, Chicoutimi, Que.  
Saturday Morning, Feb. 10  
3:00-4:00 WKEU, La Grange, Ga.  
Sunday Morning, Feb. 11  
3:00-4:00 KPQ, Wenatchee, Wash.  
Monday Morning, Feb. 12  
3:00-4:00 WKBV, Richmond, Ind.  
Tuesday Morning, Feb. 13  
3:00-4:00 WKBB, East Dubuque, Ill.  
Wednesday Morning, Feb. 14  
3:00-4:00 KGFI, Corpus Christi, Tex.  
Thursday Morning, Feb. 15  
3:00-4:00 WBNF, Binghamton, N. Y.  
Friday Morning, Feb. 16  
3:00-4:00 WWRL, Woodside, N. Y.  
Saturday Morning, Feb. 17  
3:00-4:00 WMFC, Lapeer, Mich.  
Sunday Morning, Feb. 18  
3:00-4:00 KREG, Santa Ana, Calif.  
4:00-5:00 KPJM, Prescott, Ariz.  
Monday Morning, Feb. 19  
3:00-4:00 WFDV, Rome, Ga.  
Tuesday Morning, Feb. 20  
3:00-4:00 WRDW, Augusta, Ga.

Wednesday Morning, Feb. 21  
3:00-7:00 WOPI, Bristol, Tenn.  
Thursday Morning, Feb. 22  
3:00-4:00 KGKB, Tyler, Tex.  
Friday Morning, Feb. 23  
3:00-4:00 KDB, Santa Barbara, Calif.  
Saturday Morning, Feb. 24  
3:00-4:00 WMBQ, Brooklyn, N. Y.  
4:00-5:00 WCNW, Brooklyn, N. Y.  
Sunday Morning, Feb. 25  
3:00-4:00 KXO, El Centro, Calif.  
4:00-5:00 WKBZ, Ludington, Mich.  
Monday Morning, Feb. 26  
3:00-4:00 KNOX, Austin, Tex.  
Tuesday Morning, Feb. 27  
3:00-4:00 WWSW, Pittsburgh, Pa.  
Wednesday Morning, Feb. 28  
3:00-4:00 WHEF, Kosciusko, Miss.

"Help Yourself to Better Reception" is the title of an article which will appear in the March issue. It covers the subject of street noises and how to erect an aerial that will block them out.

## What's Wrong with Set

(Continued from page 36)

tached, and connected together to a common terminal which, in turn, is connected to the plate of the 56 a.v.c. tube just placed within the set.

The cathode terminal, on the socket, of this tube, is connected, through a 25,000 to 50,000 ohms resistor (selected by experimentation) to the tap on the first filter choke that connects to the speaker field coil. This resistor in the cathode is shunted with a 0.1 mfd. fixed by-pass condenser. The grid of the a.v.c. tube is then connected to the plate of the second intermediate-frequency tube through a .00025 mfd. condenser inserted in series. The grid of the a.v.c. tube (56) also is returned to the cathode circuit of the same tube through a 2 megohm resistor placed in series. The plate of the a.v.c. tube, which is also con-

nected to the lower ends of the three stages above mentioned through the 250,000 ohms resistors, is by-passed to the cathode through a 0.5 by-pass condenser.

The heater of the a.v.c. tube is connected to the common heater winding of the power unit furnishing any of the 2.5-volt tubes. The plate of the a.v.c. tube, also is grounded through a resistor that is variable between 10,000 and 150,000 ohms.

After this work has been done the entire set may require readjusting for proper r.f. and i.f. alignment. We do not advise the use of new tubes of the 50 series in this circuit.

## BETTY'S Gossip Page

(Continued from page 10)

teners. Finally she went to a psychoanalyst with her trouble and received this opinion from him; Her melancholy tones are of a type that make the men want to comfort her and at the same time woman listeners feel sorry for her!

George Hall's father, a classical musician who used to play with Victor Herbert, won't listen to his son broadcast . . . can't get over George turning to dance music when he might have been a classical artist himself.

Albert Spalding, America's foremost violinist, knocks on the rare wood of his \$35,000 Guarnerius fiddle for luck before he starts his broadcast over Columbia every Wednesday at 8:30 p.m., EST.

Isham Jones is the only one to hold cards in both the musicians' and coal miners' unions. He himself once labored in Ohio mines and each year renews his affiliation. Incidentally, Isham has a one-year-old adopted son named David, and the boys in the

band have taught this small youngster to deliver a Bronx cheer upon request.

Rudy Vallee, still in a predicting mood, picks Gertrude Niesen, Barbara Blair (Snoony), Joe Penner and Alice Faye as the most promising prospects in radio.

Jane Froman, who's as good looking as she sings, will leave the air in April after two years of continuous broadcasting. She'll be off till September for a well-earned rest.

Joe Morrison, who started "The Last Round Up" on its dizzy radio ride, is leaving George Olsen's Orchestra to enter the movies. Lanny Ross is also another radio star to break into the movies.

Tea Little—that's really her name—is Jack Little's wife and manager, and she's just as Little as he is.

## DX Notes and Tips

(Continued from page 32)

were on 720. None of the T-Ps except 2BL have been good here this winter."

"Thanks for the tip on HIX," postcards Guy R. Bigbee, Hq. Co., 66th Inf., Fort Benning, Ga. "I was not able to turn on the radio at the beginning of the program but heard it from about 8:30 to 10 p.m. CST. Program was excellent although the static kept me from hearing all that was said. I did hear the call and that part of the announcement dedicating the program to RADEX."

"Is there anyone more lonesome than a DX fan without a radio," queries Robert R. Rawstron, 296 Main St., Claremont, N. H. "Have now sold my Eveready after four years service bringing in some 770 veries in 23 countries. Its last was LR5 in Argentine. Now I have a

new B-16 Midwest somewhere on the rails between here and Cincinnati. I would like to hear from other Midwest owners in the East and will acknowledge all letters."

"Years ago, I used to be a DX fan but not until last month did I again become interested," observes Madison Letts, 1515 R st., Lincoln, Nebr. "Last night I sat down at the radio and in five minutes pulled in my 300th catch—XEW of Mexico City. I am using a 29 model Victor-RCA, model RE-45. I have just installed the Ollie Ross ground—it makes a definite improvement in reception."

### With the Clubs

From Warren E. Winkley, Box 12, Hughson, Calif., comes the information that the late Transcontinental Radio DX Club has been reorganized and renamed the Universal Radio DX Club with Charles C. Norton, 2559 Polk St., San Francisco, as president. Station KPCB, two of whose officers are directors of the Club, is putting on a DX program for the new club "every other first Monday of each month from midnight to 2 a.m., PST. My log is now at 428," says Mr. Winkley, "with one Chinese, five Aussies, one Zedder, 29 Japs and F31CD. On the night of Oct. 21 I picked up 22 Japs—the best night I ever experienced. I can start listening to them as early as 10:30 p.m., PST."

The Universal Radio DX Club, said to be the only club of its kind in the West, is putting out a news sheet every ten days. They hope to put on many special programs by stations that are rarely heard in the East. The membership fee is 35 cents and the dues 95 cents a year. Club news and tips will be given out over station KPCB on the first Monday morning of each month from midnight to 2 a.m., PST.

"KDKA has a DX club now," postcards Joe Stokes, 7318 Woodlawn Ave., Swissvale, Pa. "They are broadcasting tips and news every Sunday night at 12:30 a.m., EST."



# WHAT'S ON THE AIR TONIGHT?

Fill in calls and dial numbers for those stations through which you best receive the three chains. You can then turn quickly to the one that has the feature you want.

COLUMBIA.....(C)	
Call	Dial

NATIONAL, Red (R)	
Call	Dial

NATIONAL, Blue.(B)	
Call	Dial

TIME: E Eastern; C Central; M Mountain; P Pacific.

RADEX is the only publication listing stations in alphabetical order for your convenience.

While these programs are correct at the time of going to press changes are made from time to time.

## MONDAY

E-8:00 p.m., C-5:00, M-4:00, P-3:00  
C — Buck Rogers, See Monday

CKLW WAAB WABC WADC WBT  
WCAO WCAU WDRC WEAN WHK  
WJSV WKWB WOKO

R — Waldorf Astoria Orchestra  
KDYL KFYY KOA KPO KPRC KSD  
KSTP KTBS KTHS KVOO WAPI  
WBEN WCAE WCHS WDAF WDAY  
WEAF WECB WFAA WFLA WHO  
WIBA WIOD WIS WJAR WJAX  
WJDX WKY WMAQ WMC WOAI  
WOC WRC WRVA WSAI WSM  
WSMB WSOB WTAG WWJ WNNC

B — U. S. Army Band  
KOIL KSO KWCR KWK KYW WBAL  
WBZ WBZA WCKY WENR WHAM  
WJZ WMAL WREN WSYR

E-8:15 p.m., C-6:15, M-4:15, P-3:15  
C — Bobby Benson; Sunny Jim  
WAAB WABC WCAU WDRC WEAN  
WFBL WGR WHC WHK WLBZ  
WMAS WOKO WORC

E-8:30 p.m., C-5:30, M-4:30, P-3:30  
C — Enoch Light and Orchestra  
CKLW KLRA WAAB WADC WBIG  
WBRC WCAO WCAU WDAE WDBO  
WDOD WDRC WDSU WFBL WFEA  
WGIC WGST WHEC WHP WICC  
WKBN WKWB WLBZ WMAS WMBG  
WOKO WORC WQAM WJSV WSPD  
WTAR WTOC

R — Irene Besseley Songs  
KGO KOA WAPI WBEN WCKY  
WEAF WFER WGY WHO WJDX  
WMC WOC WSAI WSB WSM  
WSOC WTAG WWJ

E-8:45 p.m., C-5:45, M-4:45, P-3:45  
R — Horsensense Philosophy; Andrew Kelly

KOA WAPI WBEN WCAE WCKY  
WEAF WFAA WFER WGY WHO  
WJDX WMAQ WMC WOC WSAI  
WSB WSM WSMB WTAG WWJ

B — Lowell Thomas  
CRCT KDKA WBAL WBZ WBZA  
WFLA WGAR WHAM WIOD WJAX  
WJR WJZ WLW WSYR

C — Mildred Bailey, Songs  
CFRB CKLW KLRA KLZ KMBC  
KOMA KRLD KSCJ KTRH WAAB  
WABC WBIG WBRC WCAH WCAU  
WCAU WDAE WDBJ WDOD WDRC  
WDSU WEAN WFBL WFBM WFEA  
WGIC WGST WHAS WHEC WHP  
WIBW WICC WISN WJSV WKBN  
WKWB WLBZ WMAS WMBG WMT  
WOKO WORC WQAM WJSV WSPD  
WTAR WTOC WWVA

E-7:00 p.m., C-8:00, M-5:00, P-4:00

C — Myrt and Marge  
CKLW KRLD WABC WADC WBT  
WCAO WCAU WDAE WDBO WDRC  
WEAN WFBL WGR WHK WJAS  
WJSV WKRC WNAC WOKO WQAM  
WSPD WTOC WWVA

R — Mollie Show  
KSD WBEN WCAE WCHS WDAF  
WEAF WEEI WFER WGY WHO  
WJAR WLIT WMAQ WOC WOV  
WRC WTAG WTAM WTIC WWJ

B — Ames 'n' Andy  
CRCT KDKA WBAL WBZ WBZA  
WCKY WFLA WGAR WHAM WIOD  
WJR WJZ WLW WMAL WPTT  
WRVA

E-7:15 p.m., C-6:15, M-5:15, P-4:15

C — Just Plain Bill  
CFRB CKLW WABC WCAO WCAU  
WGR WHK WJSV WKRC WNAC  
R — Billy Bachelor; Ray Knight  
WEAF WGY WJAR WRC WTAG  
WTAM WWJ

B — Baby Rose Marie, Songs  
KDKA WBAL WBZ WBZA WHAM  
WJZ WMAL WSYR

E-7:30 p.m., C-6:30, M-5:30, P-4:30

C — Music in the Air  
WABC WCAO WCAU WDRC WEAN  
WFBL WFLA WGR WHC WHK  
WJAS WJSV WLBZ WNAC WOKO  
WORC

R — Lum and Abner  
KSD WBEN WCAE WCHS WDAF  
WEAF WEEI WFER WGY WJAR  
WLW WRC WTAG

B — Potash and Perlmutter  
KDKA KOIL KSO KWCR KWK  
WBAL WBZ WBZA WCKY WENR  
WHAM WJR WJZ WMAL WREN  
WSYR

E-7:45 p.m., C-8:45, M-5:45, P-4:45

C — Boake Carter; Philco  
CKLW KMBC KMOX WABC WBBM  
WBT WCAO WCAU WCCO WGR  
WHAS WHK WJAS WJSV WNAC

R — The Goldbergs  
WBEN WCAE WCHS WDAF WEAF  
WEEI WENR WFER WGY WJAR  
WLIT WOV WRC WSAI WTAG  
WTAM WWJ

B — Mme. Frances Alda  
KDKA KDYL KFI, KFYY, KGO  
KGW KHQ KOA KOIL KOMO  
KPRC KTBS KTHS KWCR KWK  
KYW WBAL WBAF WBZ WBZA  
WHAM WIBA WJDX WJZ WKY  
WMAL WOAI WSMB WSYR

E-8:00 p.m., C-7:00, M-6:00, P-5:00

C — Happy Bakers  
CKLW WABC WADC WCAH WDRC  
WFBM WGN WGR WHC WHK  
WICC WJSV WMAS WMBG WMT  
WNAC WORC WSPD WWVA

R — Soconyland Sketches—Drama  
WBEN WCHS WEAF WEEI WGY  
WJAR WTAG WTIC

B — Sealed Power Side Show  
KDKA KFYY KOIL KPRC KSO  
KSTP KTBS KTHS KVOO KWCR  
KWK WBAL WBZ WBZA WDAY  
WECB WFAA WGAR WHAM WIBA  
WJDX WJR WJZ WKY WLS WMAL  
WMC WOAI WSM WSMB WSYR  
WTMJ

E-8:15 p.m., C-7:15, M-6:15, P-5:15

C — Edwin C. Hill  
CKLW KMBC KMOX WABC WADC  
WCAO WCAU WCCO WDRC WEAN  
WFBL WFBM WGN WGR WHK  
WJAS WJSV WKRC WNAC WOKO  
WSPD

E-8:30 p.m., C-7:30, M-6:30, P-5:30

C — Bing Crosby  
CKLW KDB KERN KFBK KFYY  
KFRC KGB KHJ KLZ KMBC KVI  
KMOX KOIN KOL KSL KVI KWG  
WABC WADC WCAO WCAU WDRC  
WEAN WFBL WFBM WGN WGR  
WHAS WHK WJAS WJSV WKRC  
WNAC WOKO WOV WSPD

R — Voice of Firestone  
CFRC CRCT KFYY KPRC KSD  
KTBS KTHS KVOO WBEN WCHS  
WDAF WDAY WEAF WECB WEEI  
WFAA WFER WFLA WGY WHO  
WIOD WIS WJAR WJAX WJDX  
WKY WLIT WLW WMAQ WMC  
WOAI WOC WOV WRC WRVA WSM  
WSM WSOB WTAG WTAM  
WTIC WTMTJ WWJ WNNC

B — Dior Kiss Recital  
KDKA KOIL KSO KWCR KWK  
WBAL WBZ WBZA WCKY WGAR  
WJZ WLS WMAL WREN WSYR

E-8:45 p.m., C-7:45, M-6:45, P-5:45

B — Red Davis—Dramatic Sketch  
KDKA WBAL WBZ WBZA WHAM  
WJR WJZ WLS WSYR

E-9:00 p.m., C-8:00, M-7:00, P-6:00

C — Philadelphia Symphony Orchestra  
CKLW KDB KERN KFBK KFH  
KFYY KFRC KGB KHJ KLRA KLZ  
KMBC KMOX KMOX KOH KOIN  
KOL KOMA KSL KTRH KTSB  
KVI KWG WABC WADC WBBM  
WBRC WBT WCAH WCAU WCAU  
WCCO WDAE WDBJ WDOD WDRC

## MONDAY—(Continued)

WDSU WEAN WFBL WFBM WGR  
WGST WHAS WHEC WHK WICO  
WISN WJAS WJSV WKRC WLAC  
WLBZ WMBG WMT WNAC WOKO  
WOW WPG WQAM WREC WRR  
WSPD WTR WTTC

R — A. & P. Gypsy  
KSD WBEN WCAE WCHS WDAF  
WEAF WEEI WGY WHO WJAR  
WLIT WMAQ WOC WOV WRC  
WSAI WTAG WTAM WTIC WWJ

B — Sinclair Minstrels  
KDKA KFYY KOA KOIL KPRC  
KSO KSTP KTBS KTHS KVOO  
KWCR KWK WBAL WBZ WBZA  
WDAY WECB WFAA WFLA WGAR  
WHA WIBA WIOD WIS WJAX  
WJDX WJR WJZ WKY WLS WLW  
WMC WOAI WPTT WREN WRVA  
WSB WSM WSMB WTMJ WNNC

E-9:15 p.m., C-8:15, M-7:15, P-6:15

C — Buick; Andre Kostelanetz  
CKLW KDB KERN KFBK KFH  
KFYY KFRC KGB KHJ KLRA KLZ  
KMBC KMOX KOIN KOL KOMA  
KSCJ KSL KSL KSL KSL KSL  
KVI KWG WABC WADC WBBM  
WBRC WBT WCAH WCAU WCAU  
WCCO WDAE WDRC WDSU WEAN  
WFBL WFBM WGST WHAS WHEC  
WHK WIBW WICC WISN WJAS  
WJSV WKWB WKRC WLAC WMBD  
WMT WNAC WOKO WOV WQAM  
WREC WRR WSPD WTR WTTC

E-9:30 p.m., C-8:30, M-7:30, P-6:30

C — Isham Jones; Gertrude Niesen  
CFRB CKLW KDB KERN KFBK  
KFYY KFRC KGB KHJ KLZ KMBC  
KVI KMOX KOIN KOL KRLD  
KSL KVI KWG WABC WADC  
WBBM WBT WCAH WCAU WCAU  
WCCO WDRC WDSU WEAN WFBL  
WFBM WHAS WHK WICC WJAS  
WJSV WKWB WKRC WLAC WNAC  
WOKO WOV WREC WSPD WTR  
WTTC

E-9:45 p.m., C-8:45, M-7:45, P-6:45

C — Del Monte Ship of Joy  
KDYL KOA KPRC KSD KSTP  
KTBS KVOO WBEN WCAE WCHS  
WEAF WECB WEEI WFAA WFER  
WFLA WGY WHO WIOD WIS  
WJAR WJAX WKBK WKY WLIT  
WMAQ WOAI WOC WOV WRC  
WRVA WSAI WTAG WTAM WTMJ  
WWJ WNNC

B — Jack Frost's Melody Moments  
KDKA WBAL WENR WGAR WHAM  
WJR WJZ WLW

E-10:00 p.m., C-9:00, M-8:00, P-7:00

C — Wayne King and Orchestra  
CKLW KALE KDB KERN KFRC  
KGB KHJ KLZ KMBC KMOX  
KOIN KOL KSL KWG WABC WABC  
WADC WBBM WCAO WCAU WCCO  
WDRC WEAN WFBL WFBM WGR  
WHAS WHK WJAS WJSV WKRC  
WOKO WOV WSPD

R — Contented Program  
CFRC CRCT KDYL KFI KFYY  
KGO KGW KHQ KOA KOMO KPRC  
KSTP KSWB WEAF WECB WEEI  
WFER WJAR WLIT WMC WOAI  
WRC WSR WSM WTAG

B — Marcel Rodrigo, Baritone  
KDKA KOIL KSO KWCR KWK  
WBAL WBZ WBZA WHAM WJZ  
WMAL WSYR

E-10:30 p.m., C-9:30, M-8:30, P-7:30

C — Columbia News Service  
CKAC CKLW KLRA KRLD KTRH

KTSA KVOR WAAB WABC WACO  
WBIG WBT WCAH WCAO WCAU  
WDAE WDBJ WDOD WDRC  
WEAN WFBL WFEA WGR WGST  
WHAS WHEC WHP WISN WJAS  
WJSV WKBN WLAC WLWB WLBZ  
WMAS WMT WODX WOKO WORC  
WQAM WREC WJSV WSPD WTOC

R — Kay-Seven, Drama  
CRCT KSD WBEN WCAE WCHS  
WDAF WEAF WEEI WFER WGY  
WHO WJAR WLIT WLW WMAQ  
WOC WOV WRC WTAG WTAM  
WTIC WWJ

B — Henri Deering, Concert Pianist  
KFYY KOIL KPRC KSO KSTP  
KTBS KVOO KWCR WBAL WBZ  
WBZA WCKY WECB WFAA WHAM  
WIBA WJDX WJZ WKY WMAL  
WOAI WREN WSB WSM WSMB  
WSYR

E-10:45 p.m., C-9:45, M-8:45, P-7:45

C — Myrt and Marge  
KDB KERN KFBK KFYY KFRC  
KGB KHJ KLRA KLZ KMBC KVI  
KMOX KOIN KOL KOMA KSL  
KVI KWG WABC WADC WBBM  
WBRC WBT WCAH WCAU WCAU  
WCCO WDAE WDRC WDSU WEAN  
WFBL WFBM WGST WHAS WHEC  
WHK WIBW WICC WISN WJAS  
WJSV WKWB WKRC WLAC WMBD  
WMT WNAC WOKO WOV WQAM  
WREC WRR WSPD WTR WTTC

E-11:00 p.m., C-10:00, M-9:00, P-8:00

C — Evan Evans, Baritone  
CKLW KFH KLRA KLZ KMBC  
KSCJ KTRH WAAB WABC WADC  
WBRC WCAH WCAU WDAE WDBJ  
WDOD WDRC WDSU WEAN  
WFEA WGLC WGST WHAS WHEC  
WHK WHP WIBW WICC WIP WISN  
WJAS WJSV WKBN WKWB WLBZ  
WMAS WMBD WMBG WMT WODX  
WOKO WORC WQAM WJSV WSPD  
WTAR WTOC

B — Ames 'n' Andy  
KDYL KFI KGO KGW KHQ KOA  
KOIL KOMO KPRC KSTP KTBS  
KWK WBAF WDAF WENR WKY  
WMAQ WMC WOAI WREN WSB  
WSM WSMB WTMJ

E-11:15 p.m., C-10:15, M-9:15, P-8:15

C — Boswell Sisters  
CFRB CKLW KFAB KFH KLRA  
KLZ KMBC KTRH KTSB KVOR  
WAAB WABC WACO WADC WBT  
WCAH WCAO WCCO WDAE WDBJ  
WDOD WDRC WDSU WEAN WFBM  
WFEA WGST WHP WIBW WIP  
WISN WJAS WJSV WKBN WKWB  
WLAC WLWB WLBZ WMAS WMBD  
WMT WODX WOV WPG WQAM  
WREC WSBT WJSV WSPD WTOC

E-11:30 p.m., C-10:30, M-9:30, P-8:30

C — Abe Lyman and Orchestra  
CFRB CKLW KFH KLRA KLZ  
KMBC KOMA KTRH KTSB KVOR  
WABC WADC WBRC WCAO WCAU  
WDBJ WDRC WDSU WEAN WFBL  
WFBM WGST WHAS WHK WHP  
WIBW WICC WISN WJSV WKWB  
WLAC WLWB WMBD WMBG WMT  
WNAC WOKO WORC WPG WQAM  
WREC WSBT WJSV WTR WTOC

R — Voice of Firestone  
KDYL KFI KFSB KGLH KGIR KGO  
KGU KGW KHQ KOA KOMO KTRH

E-12:00 p.m., C-11:00, M-10:00, P-9:00

B — Sealed Power Side Show  
KDYL KFI KGLH KGIR KGO KGW  
KHQ KOA KOMO KTRH

## TUESDAY

E-8:00 p.m., C-5:00, M-4:00, P-3:00  
C — Buck Rogers, See Monday

R — Waldorf Astoria, See Monday  
R — Richard Himber and Orchestra  
KOIL KSO KWCR WBAL WCKY  
WENR WHAM WJR WJZ WMAL  
WREN

E-8:15 p.m., C-5:15, M-4:15, P-3:15

C — Bobby Benson, See Monday

E-8:30 p.m., C-5:30, M-4:30, P-3:30

R — Mid-Week Hymn Sing  
KDYL KFYY KGIR KPO KPRC  
KTBS KTHS KVOO WDAY WEAF  
WFAA WFI WGY WHO WIBA WIS  
WJAX WJDX WMAQ WOAI WOC  
WRC WSAI WTAG WNNC

B — Mary Small, Juvenile Singer  
KSO KWCR WBAL WCKY WENR  
WHAM WJZ WREN WSYR

C — Betty Barthel, Songs  
CKLW KLRA WAAB WABC WADC  
WBRC WCAO WCAU WCCO WDAE  
WDBJ WDOD WDRC WDSU  
WFBL WFEA WGLC WGR WGST  
WHEC WHP WICC WKBN WLBZ  
WMAS WMBG WOKO WORC WQAM  
WJSV WSPD WTR

E-8:45 p.m., C-5:45, M-4:45, P-3:45

C — Little Italy  
WAAB WABC WCAO WCAU WDRC  
WEAN WHEC WHP WKWB WOKO  
R — Choeiro Musical Messia  
KDYL KOA KPO KSD WCKY  
WEAF WEEI WFER WFLA WGY  
WHO WIOD WIS WJAR WJAX  
WJDX WMAQ WOC WOV WRVA  
WSAI WSM WSOB WTAG WWJ  
WNNC

B — Lowell Thomas, See Monday

E-9:00 p.m., C-8:00, M-7:00, P-6:00

C — Myrt and Marge, See Monday  
B — Ames 'n' Andy, See Monday

E-9:15 p.m., C-8:15, M-7:15, P-6:15

C — Just Plain Bill, See Monday  
R — Billy Bachelor, See Monday  
B — Radio in Education  
KDKA KECA KEX KFSB KFYY  
KGA KGLH KGIR KJR KOA KOIL  
KPRC KTRH KTBS KTHS KVOO  
KWCR KWK KYA WAPI WBAF  
WBZ WBZA WCY WFLA WHAM  
WIBA WIS WJDX WJZ WMAL  
WOAI WPTT WREN WSMB WNNC

E-9:30 p.m., C-8:30, M-7:30, P-6:30

C — Silver Dust Serenaders  
WABC WCAU WDRC WFBL WGR  
WHAC WHAS WMAS WOKO WORC  
WVVA

E-9:45 p.m., C-8:45, M-7:45, P-6:45

B — Phil Harris and Orchestra  
KDKA KFYY KOIL KPRC KSTP  
KTBS KWCR KWK WBAF WBZ  
WBZA WENR WFLA WGAR WHAM  
WIBA WIS WJZ WKY WMAL WRVA  
WSYR WNNC

C — Boake Carter, See Monday  
R — Goldbergs, See Monday

E-9:00 p.m., C-7:00, M-6:00, P-5:00

C — Columbians; Freddie Rich  
CKLW KFH KLRA KMBC KOMA  
KSCJ KTRH WABC WADC WBBM  
WBIG WBRC WCAH WCAU WCAU  
WCCO WDAE WDBJ WDOD WDRC  
WDSU WEAN WFBL WFBM  
WFEA WGLC WGR WGST WHAS



## THURSDAY—(Cont'd)

**B — Robin Hood, Drama**  
CROT WBAL WBZ WBZA WHAM  
WJZ WMAL WSYR

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**  
**B — Eddie Duchin and Orchestra**  
KDKA WBAL WBZ WBZA WJZ  
WSYR

**C — Silver Dust, See Tuesday**

**E-7:45 p.m., C-6:45, M-5:45, P-4:45**

**C — Boake Carter, See Monday**  
**R — Goldbergs, See Monday**

**E-8:00 p.m., C-7:00, M-8:00, P-5:00**

**R — Rudy Vallee and Orchestra**  
CFCF CROT KDYL KFI KFJR KGO  
KGW KHQ KOA KOMO KPRC KSD  
KSTP KTAR KTHS WAPI WBAP  
WBEN WCAE WCHS WDAF WDAY  
WEAF WEBC WEEI WFBF WFI  
WFLA WGY WHO WIOD WJAR  
WJAX WJDX WKY WLW WMAQ  
WMC WOAI WOC WOW WPTF WRC  
WRVA WSB WSM WSMB WTAG  
WTAM WTMJ WWJ

**C — Morton Downey, Tenor**  
KCLW KFH KLRA KMBC KOMA  
KSCJ KSL KTRH KTSB WABC  
WACO WADC WBIG WBRC WCAH  
WCAO WCAU WCCO WDAE WDBJ  
WDBO WDOD WDRC WDSU WEAN  
WFBL WFBM WFEA WGLC WGR  
WGST WHAS WHEC WHP WIBW  
WICG WISN WJAS WKBN WLC  
WLWB WLWZ WMAS WMBG WMT  
WNAC WOKO WORC WQAM WREC  
WSJS WSPD WTAR WTOC WVVV

**E-8:15 p.m., C-7:15, M-8:15, P-5:15**  
**C — Edwin C. Hill, See Monday**

**E-8:30 p.m., C-7:30, M-8:30, P-5:30**

**C — Voice of America**  
KCLW KMBC KMOX WABC WADC  
WBMM WCAO WCAU WDRC WEAN  
WFBL WGR WHAS WHK WJAS  
WJSV WKRC WNAC WOKO WOWO  
WSPD

**B — Horlick's, See Tuesday**

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**

**R — Maxwell House Showboat**  
KDYL KFI KFSD KGO KGW KHQ  
KOA KOMO KPRC KSD KSTP KTAR  
KTHS WAPI WBAP WBEN WCAE  
WCKY WCHS WDAF WDAF WEEI  
WFBF WFI WFLA WGY WHO WIOD  
WIS WJAR WJAX WJDX WKY  
WMAQ WMC WOAI WOC WOW  
WRC WRVA WSAI WSB WSM WSMB  
WTAG WTAM WTMJ WWSM WWSN  
**B — Death Valley Days—Drama**  
KDKA KOIL KSO KWCW KWK  
WBAL WBZ WBZA WGAR WHAM  
WJR WJZ WLS WLW WMAL WREN  
WSYR

**C — Philadelphia Symphony, See Mon.**

**E-9:15 p.m., C-8:15, M-7:15, P-6:15**  
**C — Buick Program, See Monday**

**E-9:30 p.m., C-8:30, M-7:30, P-6:30**

**C — California Melodies**  
KCLW KFH KLRA KLZ KMBC  
KOMA KRLD KSCJ KTSB WABC  
WACO WADC WBIG WBRC WCAO  
WCCO WDAE WDBJ WDOD WDOD  
WDRC WDSU WEAN WFBL WFEA  
WGLC WGST WHEC WHK WHP  
WIBW WICC WIP WJAS WKBW

WKBW WLAC WLWB WLWZ WMAS  
WMBD WMBG WMT WNAC WNAX  
WODX WOKO WORC WQAM WREC  
WSBT WSJS WSPD WTAR WTOC  
**B — Richard Himber and Orchestra**  
KDKA KOIL KSO KWCW KWK  
WBAL WBZ WBZA WENR WGAR  
WHAM WJR WJZ WREN

**E-10:00 p.m., C-9:00, M-8:00, P-7:00**  
**R — Paul Whiteman and Orchestra**  
KDYL KFI KFJR KGO KGW KHQ  
KOA KOMO KPRC KSD KSTP KTBS  
KTHS KVOO WBAP WBEN WCAE  
WCHS WDAF WDAY WEAF WEBC  
WEEI WFBF WFLA WGY WHO  
WIBA WIOD WIS WJAR WJAX  
WJDX WKY WLW WMAQ WMO  
WOAI WOC WOW WRC WRVA WSB  
WSM WSMB WTAG WTAM WTMJ  
WWJ WWSN

**B — Hands Across the Border**  
CFCF CFCB CFCF CFCB CFCN  
CFCO CFCY CFCF CFCB CFCF  
CFCO CHAB CHGS CHNS CHRC  
CHWC CHWK CJCA CJCB CJCJ  
CJGX CJOC CJRM CJRW CKCH  
CKCK CKNC CKOC CKOV CKPC  
CKPR CKUA CKX CKY CROC CROC  
CROT CROC CFCF KDKA KOIL KSO  
KWCW WBAL WBZ WBZA WCKY  
WGAR WHAM WJR WJZ WMAQ  
WREN WSYR

**C — Camel Program, See Tuesday**

**E-10:30 p.m., C-9:30, M-8:30, P-7:30**

**B — Archer Gibson, Organist**  
KDKA KSO KWCW KYW WBAL WBZ  
WBZA WCKY WGAR WHAM WJZ  
WMAL WREN

**C — News Service, See Monday**

**E-10:45 p.m., C-9:45, M-8:45, P-7:45**

**C — Myrt and Marge, See Monday**

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**

**B — Ames 'n' Andy, See Monday**  
**R — Viola Philo, Soprano**  
WCAE WCHS WDAF WFI WFLA  
WGY WIOD WIS WOW WRVA  
WTAM WWSN

**C — Presenting Mark Warnow**  
KCLW KFH KLRA KLZ KMBC  
KSCJ KTSB WAAB WABC WACO  
WADC WCAH WCAU WDAE WDBJ  
WDBO WDOD WDRC WDSU WFBM  
WFEA WGLC WGST WHAS WHEC  
WHK WHP WIBW WICC WISN  
WJAS WKBW WKBW WLAC WLWB  
WLWZ WMAS WMBD WMBG WMT  
WNAX WODX WOKO WORC WQAM  
WREC WSJS WSPD WTAR WTOC

**E-11:15 p.m., C-10:15, M-9:15, P-8:15**

**C — Charles Carlie, Tenor**  
CFCF KCLW KFH KLRA KLZ  
KMBC KSCJ KSL KTSB WAAB  
WABC WACO WADC WBRC WCAH  
WCAO WCCO WDAE WDBJ WDOD  
WDOD WDRC WDSU WEAN WFBL  
WFBM WGLC WGST WHAS WHEC  
WHP WIBW WISN WJAS WKBW  
WKBW WLAC WLWB WLWZ WMAS  
WMBD WMBG WMT WNAX WODX  
WOKO WORC WPG WQAM WREC  
WSJS WSPD WTAR WTOC

**B — Poet Prince, See Wednesday**

**E-11:30 p.m., C-10:30, M-9:30, P-8:30**

**R — Enric Madriguera and Orchestra**  
KSD WBEN WCAE WCHS WDAF  
WEAF WEEI WFBF WFI WGY  
WHO WJAR WOC WOW WSAI  
WTAG WTAM

**C — Edwin C. Hill, See Wednesday**  
**C — Isham Jones and Orchestra**  
KCLW KLRA WABC WBRC WCAO  
WDAE WDBJ WDOD WDOD WDRC  
WDSU WEAN WGST WICC WIP  
WLAC WLWB WMAS WMBG WNAC  
WORC WQAM WREC WSJS WSPD  
WTAR WTOC

## FRIDAY

**E-8:00 p.m., C-6:50, M-4:00, P-3:00**

**C — H. V. Kaltenborn**  
CFCF KCLW KLRA WAAB WABC  
WADC WBIG WBT WCAO WCAU  
WDAE WDBJ WDOD WDOD WDRC  
WFEA WGST WHEC WHK WICC  
WJSV WLAC WLWB WLWZ WMBG  
WOKO WORC WQAM WREC WSFA  
WSJS WSPD WTOC

**R — Waldorf Astoria, See Monday**

**E-8:15 p.m., C-6:15, M-4:15, P-3:15**  
**C — Bobby Benson, See Monday**

**E-8:30 p.m., C-6:30, M-4:30, P-3:30**

**B — Three X Sisters**  
KDKA KOIL KWCW KWK WBAL  
WBZ WBZA WCKY WENR WHAM  
WJZ WMAL WREN WSYR

**R — Irene Beasley, See Monday**

**C — Tito Guizar, Tenor**  
CFCF KCLW WAAB WABC WBIG  
WBRC WBT WCAO WDAE WDBJ  
WDRC WDSU WFEA WGST WHEC  
WKBW WKBW WLWZ WMAS WMBG  
WOKO WORC WQAM WREC WSFA  
WSJS WTOC

**E-8:45 p.m., C-6:45, M-4:45, P-3:45**

**C — Zed Parenteau's Orchestra**  
KCLW WAAB WABC WBT WCAU  
WDRC WEAN WFBL WFEA WHEC  
WJSV WKBW WLWZ WOKO

**B — Lowell Thomas, See Monday**  
**R — Mountain Music**  
KDYL KOA KSD WCAE WCKY  
WEAF WEEI WJDX WMAQ WOW  
WSB WTAG WWJ

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**

**C — Myrt and Marge, See Monday**  
**B — Ames 'n' Andy, See Monday**

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**

**C — Just Plain Bill, See Monday**  
**R — Billy Bachelor, See Monday**  
**B — Dramatic Sketch, See Thursday**

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**

**R — Scott's Circus Day**  
KSD WCHS WDAF WEAF WEEI  
WGY WJAR WKBW WLW WMAQ  
WOW WRC WTAG WTAM WTIC  
**B — Potash and Perlmutter, See Mon.**  
**C — Music in Air, See Monday.**

**E-7:45 p.m., C-6:45, M-5:45, P-4:45**

**C — Boake Carter, See Monday**  
**R — Goldbergs, See Monday**  
**B — Morton Lowe, Tenor**  
KDKA WBAL WBZ WBZA WCKY  
WENR WJZ WMC WSB WSM WSMB  
WSYR

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**

**C — Happy Bakers, See Monday**  
**R — Cities Service Concert**  
CROT KDYL KOA KPRC KSD KTBS  
KTHS KYW WBEN WCAE WCHS  
WDAF WEAF WEBC WEEI WFAA  
WFBF WGY WHO WJAR WKY WLIT  
WOAI WOC WOW WRC WRVA WSAI  
WTAG WTAM WTMJ WWJ

## FRIDAY—(Continued)

**B — Nestle's with Ethel Shutta**  
KDKA KWK WBAL WBZ WBZA  
WCKY WGAR WJR WJZ WLS WMAL  
WSYR

**E-8:15 p.m., C-7:15, M-6:15, P-5:15**  
**C — Edwin C. Hill, See Monday**

**E-8:30 p.m., C-7:30, M-6:30, P-5:30**

**C — March of Time**  
KCLW KDB KERN KFBK KFPY  
KFRC KGB KHJ KLZ KMBC KMJ  
KMOX KOIN KOL KSL KTRH KVI  
KWCW WABC WCAO WCAU WCCO  
WDRC WDSU WEAN WFBL WFBM  
WGN WGR WGST WHAS WHK WJAS  
WJSV WKRC WNAC WOKO WSPD  
**B — Dangerous Paradise, See Wed.**

**E-8:45 p.m., C-7:45, M-6:45, P-5:45**  
**B — Red Davis, See Monday**

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**

**B — Phil Harris and Orchestra**  
CFCF KDKA KDYL KFI KGHL  
KGRG KGO KGW KHQ KOA KOIL  
KOMO KSO KWCW KWK WAPI  
WBAL WBZ WBZA WCKY WFAA  
WGAR WJZ WKY WLS WMAL  
WOAI WREN WSB WSM WSMB  
WSYR

**C — Philadelphia Symphony, See Mon.**  
**R — Frank Munn; Abe Lyman**  
KSD WBEN WCHS WDAF WEEI  
WFBF WGY WJAR WLIT WMAQ  
WOW WRC WSAI WTAG WTAM  
WWJ

**E-9:15 p.m., C-8:15, M-7:15, P-6:15**

**C — Alexander Woolcott, See Tuesday**

**E-9:30 p.m., C-8:30, M-7:30, P-6:30**

**C — Melodic Strings**  
CFCF KCLW KFH KLRA KLZ  
KMBC KOMA KRLD KSCJ KSL  
KTRH KTSB KVCW WABC WACO  
WADC WBIG WBRC WCAH WCAO  
WCAU WCCO WDAE WDBJ WDOD  
WDOD WDRC WDSU WEAN WFBL  
WFBM WFEA WGLC WGST WHAS  
WHEC WHP WIBW WICC WJAS  
WJSV WKBW WLAC WLWB WLWZ  
WMAS WMBD WMBG WMT WNAC  
WNAX WODX WOKO WORC WQAM  
WREC WSBT WSJS WSPD WTAR  
WTOC

**R — Pond's Program; Lee Wiley**  
KSD WBEN WCAE WCHS WDAF  
WEAF WFBF WGY WHO WJAR  
WLIT WMAQ WOC WOW WRC WSAI  
WTAG WTAM WTIC WWJ

**B — Armour Program; Phil Baker**  
KDKA KDYL KFI KGO KGW KHQ  
KOA KOIL KOMO KPRC KSD KSTP  
KTAR KWK WAPI WBAL WBZ  
WBZA WBCW WENR WFAA WGAR  
WHAM WIOD WJAX WJR WJZ  
WKY WMC WOAI WENR WRVA  
WSB WSM WSMB WTMJ WWSN

**E-10:00 p.m., C-9:00, M-8:00, P-7:00**

**C — Swift Revue—Olson and Johnson**  
KCLW KDB KERN KFBK KFPY  
KFRC KGB KHJ KLZ KMBC KMJ  
KMOX KOIN KOL KOMA KRLD  
KSCJ KSL KTRH KVI KVG WABC  
WADC WBBM WBRC WBT WCAO  
WCAU WCCO WDRC WEAN WFBL  
WGST WHAS WHK WJAS WJSV  
WKBW WKRC WNAC WOKO WOWO  
WREC

**R — First Nighter—Drama**  
CROT KDYL KFI KGO KGW KHQ  
KOA KOMO KPRC KSD KSTP  
WAPI WBEN WCAE WCHS WDAF  
WEAF WEBC WEEI WFBF WGY  
WHO WJAR WKY WLIT WMAQ  
WOAI WOC WOW WRC WSAI WSB  
WSM WSMB WTAG WTAM WTIC  
WTMJ WWJ

**B — Armo Ironmaster Program**  
KDKA KOIL KSO KWCW WBAL  
WBZ WBZA WENR WGAR WHAM  
WJR WJZ WLW WMAL WREN  
WSYR

**E-10:30 p.m., C-9:30, M-8:30, P-7:30**  
**B — Mario Corri, Baritone**  
KDKA KFJR KOIL KSO WAPI  
WBAL WBZ WBZA WCKY WDAY  
WEAF WFLA WHAM WIBA WICD  
WIS WJAX WJR WJZ WREN WSE  
WSM WSYR WWSN

**C — News Service, See Monday**

**E-10:45 p.m., C-9:45, M-8:45, P-7:45**  
**C — Myrt and Marge, See Monday**

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**

**B — Ames 'n' Andy, See Monday**  
**C — Mary Eastman, Soprano**  
KCLW KFH KLZ KMBC KSCJ KTRH  
KTSB KVCW WAAB WABC WADC  
WBRC WBT WCAH WCAU WDAE  
WDBJ WDRC WDSU WEAN WFEA  
WGST WHAS WHEC WHK WHP  
WIBW WICC WISN WJAS WJSV  
WKBW WLWB WLWZ WMAS WMBD  
WMBG WMT WODX WOKO WORC  
WOWO WPG WQAM WREC WSJS  
WSPD WTOC

**E-11:15 p.m., C-10:15, M-9:15, P-8:15**  
**C — Boswell Sisters, See Monday**

**E-11:30 p.m., C-10:30, M-9:30, P-8:30**

**C — Isham Jones, See Thursday**  
**C — Edwin C. Hill, See Wednesday**

## SATURDAY

**E-6:00 p.m., C-5:00, M-4:00, P-3:00**

**C — Meet the Artist**  
CFCF KCLW KFH KLRA KMBC  
KOMA KSL KTRH KTSB KVCW  
WAAB WABC WACO WADC WBMM  
WBIG WBRC WCAO WCCO WDBJ  
WDSU WFBL WFEA WGR WGST  
WHAS WHEC WHK WHP WIBW  
WICC WIP WISN WJAS WJSV WLAC  
WLWB WLWZ WMBG WMT WOKO  
WQAM WREC WSBT WSFA WSJS  
WTAG WTAR WTOC WVVV

**R — Waldorf Astoria, See Monday**

**B — Trio Romantique**  
KOIL KSO KWCW KYW WBAL WBZ  
WBZA WCKY WHAM WJR WJZ  
WMAL WREN WSYR

**E-6:15 p.m., C-5:15, M-4:15, P-3:15**

**C — Mildred Bailey, Songs**  
CKAC KCLW KFAB KFH KLRA  
KLZ KMBC KRLD KSL KTRH KTSB  
KVCW WAAB WABC WACO WBIG  
WBT WCAH WCAO WCCO WDAE  
WDBJ WDOD WDOD WDRC WEAN  
WFEA WGR WGST WHEC WHK  
WHP WIBW WICC WIP WISN  
WJAS WJSV WLAC WLWB WLWZ  
WMBG WMT WOKO WORC WQAM  
WREC WSBT WSFA WSJS WSPD  
WTAG WTOC WVVV

**B — O'Leary's Irish Minstrels**  
KOIL KSO KWCW KYW WBAL WBZ

WBZA WCKY WHAM WJR WJZ  
WMAL WREN WSYR

**E-6:30 p.m., C-5:30, M-4:30, P-3:30**

**B — Mary Small, See Tuesday**  
**C — Frederic William Wile**  
KCLW KLRA WAAB WABC WBIG  
WBRC WCAO WCAU WDAE WDBJ  
WDOD WDOD WDRC WDSU WFBL  
WFEA WGLC WGST WHEC WHP  
WJSV WKBW WLAC WLWB WLWZ  
WMBG WQAM WOKO WORC WQAM  
WREC WSJS WSPD WTAR WTOC

**R — Richard Himber and Orchestra**  
KDYL KFI KFJR KGO KGW KHQ  
KOA KOMO KPRC KSD KSTP KTBS  
KTHS KVOO WCAE WDAF WDAY  
WEAF WEBC WFLA WHO WIBA  
WIOD WIS WJAR WJAX WJDX  
WKY WMAQ WMC WOAI WOC  
WRC WSB WSM WTAG WTAM  
WWJ WWSN

**E-8:45 p.m., C-6:45, M-4:45, P-3:45**

**B — Flying with Capt. Al Williams**  
WBAL WBZ WBZA WCKY WGAR  
WHAM WJR WJZ WSYR

**R — J. C. Nugent—Male Quartet**  
WCHS WEAF WEEI WGY WJAR  
WTAG

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**

**B — John Merrick, Baritone**  
KDKA KOIL KSO KWCW KWK  
WBAL WKCY WGAR WJZ WKBW  
WMAL WMAQ

**C — Elder Michaux Congregation**  
CFCF KCLW KFH KLRA KLZ  
KSCJ KSL KTRH KTSB KVCW  
WABC WACO WADC WBIG WBRC  
WCAO WCAU WDAE WDBJ WDOD  
WDOD WDRC WDSU WFBL WFEA  
WGLC WGR WGST WHEC WHP  
WIBW WICC WJAS WJSV WLWB  
WLWZ WMAS WMBG WMT WOKO  
WORC WQAM WREC WSJS WSPD  
WTAR WTOC WVVV

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**

**B — Dramatic Sketch, See Thursday**  
**R — Religion in the News**  
KFI KFJR KGO KGW KHQ KOA  
KOMO KSD KTBS WAPI WBEN  
WCAE WDAF WEAF WEEI WFAA  
WFBF WFI WFLA WGY WHO WIBA  
WIOD WIS WJAR WJAX WLW  
WMC WOAI WOC WRC WSM WSMB  
WTAG WTAM

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**

**R — Circus Days, See Friday**  
**C — Silver Dust, See Tuesday**  
**B — Eddie Duchin, See Thursday**

**E-7:45 p.m., C-6:45, M-5:45, P-4:45**

**C — Tito Guizar, Tenor**  
KCLW KFH KLRA KLZ KSCJ KSL  
KTRH KTSB KVCW WABC WACO  
WADC WBIG WBRC WCAH WCAO  
WCAU WCCO WDAE WDBJ WDOD  
WDOD WDRC WDSU WEAN WFBL  
WFBM WFEA WGLC WGR WGST  
WHAS WHEC WHK WHP WIBW  
WICC WISN WJAS WJSV WLAC  
WLWB WLWZ WMAS WMBG WMT  
WNAC WOKO WORC WQAM WREC  
WSBT WSJS WSPD WTAR WTOC  
WVVV

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**

**C — 45 Minutes in Hollywood**  
KCLW KLZ KMBC KMOX KSL  
KTAT KTRH KTSB WABC WACO  
WBMM WCAH WCAU WCAU WCCO





# SUNDAY—(Continued)

WDAY WEAF WEBC WEEI WENR  
WBBR WFLA WGY WHO WIBA  
WIOD WIS WJAR WJAX WJDX  
WKY WLIT WMC WOAI WOC WOW  
WRC WRVA WSAI WSB WSM  
WSMB WTAG WTAM WWJ WWCN  
B—Cadillac Concert  
KDKA KOIL KSO KWCW KWK  
WBAL WBZ WBZA WENR WGAR  
WHAM WJR WJZ WLW WMAL  
WREN WSYR

## E-8:30 p.m., C-5:30, M-4:30, P-3:30

C—Smiling Ed McConnell  
CKLW KDB KERN KFAB KFBK  
KFH KFPY KFCR KGB KHJ KLZ  
KMBC KMOX KOIN KOL KRLD  
KSL KVI KWG WAAB WABC WBBM  
WBT WCAH WCAU WCCO WDSU  
WEAN WFBL WHAS WHEC WHP  
WJAS WJSV WKBW WKRC WLAC  
WMT WOV WQAM WSPD WTAR  
WWVA

## R—Our American Schools

CFRC CRCT KDYL KECA KFSD  
KFYR KGW KOMO KPO KPRC KSD  
KSTP KTRT KTBS KVOC WAPI  
WBAP WBBN WCAE WCHS WDAF  
WDAF WEAF WEBC WEEI WFBR  
WFLA WGY WHO WIBA WIOD  
WJAR WJAX WJDX WKY WLIT  
WMAQ WMC WOAI WOC WRC  
WRVA WSAI WSB WSM WSMB  
WTAG WTAM WWJ WWCN

## E-8:45 p.m., C-5:45, M-4:45, P-3:45

C—Charles Carlie, Tenor  
CKLW KDB KERN KFBK KFPY  
KFCR KGB KHJ KLRA KLZ KMBC  
KMJ KMOX KOIN KOL KSL KVI  
KWG WAAB WABC WADC WBBM  
WBIG WBRC WCAU WCAU WCCO  
WDAE WDBO WDRC WDSU WEAN  
WGST WHAS WHK WIP WJAS  
WJSV WKBB WKBW WKRC WPG  
WSJS WTAR WTCO

## E-7:00 p.m., C-6:00, M-5:00, P-4:00

R—True Story Court  
WBEN WCAE WCHS WEAF WFBR  
WGY WJAR WMAQ WOW WRC  
WSAI WTAG WTAM WWJ  
C—Ethel Waters; George Beatty  
WABC WBT WCAU WCAU WDAE  
WDBO WDRC WEAN WFEA WGST  
WHK WJAS WJSV WKBN WLBT  
WNAC WPG WQAM WTAR WWVA

## B—Realistic; Ted Weems' Orchestra

KDKA KDYL KFI KGO KGW KHQ  
KOA KOIL KOMO KSO KWCW KWK  
WBAL WBZ WBZA WFLA WGAR  
WHAM WIS WJR WJZ WLS WLW  
WMAL WPTF WREN WRVA WSYR

## E-7:30 p.m., C-6:30, M-5:30, P-4:30

B—Ozzie Nelson; Joe Penner  
KDKA KDYL KFI KGO KGW KHQ  
KHO KOA KOIL KOMO KPRC KSO  
KSTP KTRT KTBS KVOC KWCW  
WBAL WBZ WBZA WFLA WGBZ  
WFAA WFLA WGAR WHAM WIBA  
WIOD WJAX WJDX WJR WJZ WLY  
WLS WLW WMAL WMC WOAI  
WPTF WREN WRVA WSB WSM  
WSMB WTMJ WWCN

## C—H. V. Kallenborn

CKLW KFH KLRA KLZ KOMA  
KSCJ KTRH WABC WADC WBIG  
WBRC WCAH WCAU WCAU WDAE  
WDBJ WDBO WDOD WDRC WDSU  
WEAN WFEA WGLC WGR WGST  
WHAS WHEC WHP WIBW WISN

WJAS WKBN WLBZ WMAS WOKO  
WORC WQAM WSBT WSJS WSPD  
WTAR WTCO WWVA

## E-7:45 p.m., C-6:45, M-5:45, P-4:45

C—Rin Tin Tin Thriller  
CKLW KMOX WABC WCAU WFBL  
WFBM WGN WGR WHAS WHK  
WJAS WJSV WKRC WNAK  
R—Fitch Program; Wendell Hall  
CFRC KSD WBBN WCAE WCHS  
WDAF WEAF WFBR WGY WHO  
WJAR WLIT WMAQ WOC WOW  
WRC WSAI WTAG WTAM WWJ

## E-8:00 p.m., C-7:00, M-6:00, P-5:00

R—Chase and Sanborn Hour  
CFRC CRCT KDYL KFI KFYR KGO  
KGW KHQ KOA KOMO KPRC KSD  
KSTP KTRT KTBS KVOC WBBN  
WCAE WCHS WDAF WDAF WEAF  
WEBC WFAA WFBR WFLA WGY  
WHO WIOD WIS WJAR WJAX  
WJDX WKY WLIT WLW WMAQ  
WMC WOAI WOC WOW WPTF WRC  
WRVA WSB WSM WSMB WTAG  
WTAM WTCO WTMJ WWJ WWCN

## C—Evening in Paris

CKLW KDB KERN KFBK KFPY  
KFCR KGB KHJ KLZ KMBC KMA  
KSL WABC WADC WBBM WCAU  
WCAU WCCO WDSU WEAN WFBL  
WFBM WGR WGST WHS WHK  
WJAS WJSV WKRC WOKO WSPD

## E-8:30 p.m., C-7:30, M-6:30, P-5:30

C—Ford; Fred Waring's Orchestra  
CFRB CKAC CKLW KFAB KFH  
KLRA KLZ KMBC KMOX KOH  
KOMA KRLD KSL KTRH KTSB  
KVOR WAAB WABC WACO WADC  
WBBM WBIG WBRC WBT WCAH  
WCAU WCAU WCCO WDAE WDBJ  
WDBO WDOD WDRC WDSU WEAN  
WFBL WFBM WFEA WGST WHAS  
WHEC WHK WHP WIBW WICC  
WISN WJAS WJSV WKBN WKBW  
WKRC WLAC WLWB WLWB WMAS  
WMBD WMBG WMT WOKO WORC  
WOW WPG WQAM WREC WSFA  
WSPD WTAQ WTAR WTCO WWVA

## E-9:00 p.m., C-8:00, M-7:00, P-6:00

C—Erno Rapee; Nino Martini  
CKLW KDB KERN KFBK KFPY  
KFCR KGB KHJ KLRA KLZ KMBC  
KMJ KMOX KOIN KOL KOMA  
KRLD KSCJ KSL KTRH KVI KWG  
WABC WADC WBBM WCAU WCAU  
WCCO WDRC WDSU WEAN WFBL  
WFBM WGR WGST WHAS WHK  
WISN WJAS WJSV WKRC WMT  
WNAC WNAX WOKO WORC WOWO  
WREC WSPD WTAR

## R—Manhattan Merry-Go-Round

KDYL KFI KGO KGW KHQ KOA  
KOMO KSD WDAF WEAF WFBR  
WPI WGY WHO WJAR WMAQ WOC  
WOW WRC WSAI WTAM WTCO  
WTAR

## B—Gulf Headliners

KAKA KFCR KTBS WBAL WBZ  
WBZA WFAA WFLA WGAR WHAM  
WIOD WIS WJAX WJDX WJR WJZ  
WLW WMAL WMC WOAI WRVA  
WSB WSM WSMB WSYR WWCN

## E-9:30 p.m., C-8:30, M-7:30, P-6:30

R—Album of Familiar Music  
CFRC CRCT KDYL KFI KGO KGW  
KGW KOA KOMO KPRC KSD KSTP  
WAPI WBBN WCAE WCKY WCHS  
WDAF WEAF WEEI WFAA WFBR  
WFI WFLA WGY WHO WIOD WJAR  
WJAX WJDX WKY WMAQ WMC  
WOAI WOC WOW WPTF WRC

WRVA WSAI WSB WSM WSMB  
WTAG WTAM WTMJ WWJ  
B—Walter Winchell  
KDKA KOIL KSO KWCW KWK  
WBAL WBZ WBZA WENR WGAR  
WHAM WJR WJZ WLW WMAL  
WREN WSYR

## E-9:45 p.m., C-8:45, M-7:45, P-6:45

B—Gould and Shafter Piano Duo  
KDKA KOIL KSO KWCW KWK  
KYW WBAL WBZ WBZA WGAR  
WHAM WJR WJZ WMAL WREN  
WSYR

## E-10:00 p.m., C-9:00, M-8:00, P-7:00

R—Chevrolet; Jack Benny  
KDYL KFI KFSO KFYR KGHL  
KGIR KGO KGW KHQ KOA KOMO  
KPRC KSTP KTRT KTBS WAPI  
WBAP WBBN WCAE WCHS WDAF  
WDAF WEAF WEBC WEEI WFBR  
WFI WFLA WGY WIBA WIOD WIS  
WJAR WJDX WKY WMAQ WMC  
WOAI WOW WRC WRVA WSB WSM  
WSMB WTAG WTAM WTCO WTMJ  
WWJ WWCN

## C—Pat's Childhood Dramas

CKLW KDB KERN KFBK KFPY  
KFCR KGB KHJ KLZ KMBC KMJ  
KMOX KOIN KOL KSL KVI KWG  
WAAB WABC WCAU WCAU WCCO  
WDRC WFBL WGR WHAS WHK  
WJAS WJSV WKRC WOKO

## E-10:30 p.m., C-9:30, M-8:30, P-7:30

R—Hall of Fame  
KDYL KFI KGO KGW KHQ KOA  
KOMO KPRC KTBS KTHS WAPI  
WBAP WBBN WCAE WCHS WDAF  
WDAF WEAF WFBR WFI WGY  
WJAR WJDX WKY WLW WMAQ  
WMC WOAI WOW WRC WSM  
WTAG WTAM WTCO WWJ

## E-11:00 p.m., C-10:00, M-9:00, P-8:00

C—Little Jack Little and Orchestra  
CFRB CKAC CKLW KFH KLRA  
KLZ KTRH KTSB KVOR WABC  
WACO WBIG WBRC WCAH WCAU  
WDAE WDBJ WDBO WDOD WDRC  
WDSU WEAN WGST WHAS WHEC  
WHP WICC WIP WISN WJAS WJSV  
WKBN WLAC WLWB WMAS WMBD  
WNAC WODX WOKO WPG WQAM  
WREC WSFA WSJS WSPD WTAR  
WTCO

## B—John Fogarty, Tenor

KDKA KGHL KOIL KSO KWCW  
KWK WBAL WBZ WBZA WCKY  
WGAR WJR WJZ WLW WREN

## E-11:15 p.m., C-10:15, M-9:15, P-8:15

B—Walter Winchell  
KDYL KFI KFSO KGHL KGIR  
KGO KGW KHQ KOA KOMO KPRC  
KTRT KTBS KTHS WAPI WBAP  
WJDX WKY WMC WOAI WSB WSM  
WSMB

## E-11:30 p.m., C-10:30, M-9:30, P-8:30

C—Leon Belasco and Orchestra  
CFRB CKLW KFH KLZ KOMA  
KSCJ KTRH KTSB KVOR WABC  
WADC WBBN WBT WCAH WCAU  
WCAU WDAE WDBJ WDRC WDSU  
WEAN WFBL WFBM WGR WGST  
WHEC WHK WHP WIBW WICC  
WISN WJAS WJSV WKBN WLWB  
WMAS WMBD WMT WNAC WOKO  
WQAM WREC WSBT WSJS WSPD  
WTCO

## B—Paul Whiteman and Orchestra

KDKA KFYR KOIL KSO KSTP  
KWCW KWK WBAL WBZ WBZA  
WCKY WDAF WEBC WGAR WIBA  
WJR WJZ WLW WREN

# CLASSIFIED INDEX TO CHAIN PROGRAMS

## Time in Eastern Standard

### CONCERTS

Armed Ironmaster Program, 10:00 p.m., Friday, B.  
Boston Symphony, 8:30 p.m., Saturday, B.  
Cadillac Concert, 6:00 p.m., Sunday, B.  
Hoover Sentinels, 4:30 p.m., Sunday, R.  
Metropolitan Opera, 9:00 p.m., Saturday, R.  
New York Philharmonic Symphony, 3:00 p.m., Sunday, C.  
Philadelphia Symphony, 9:00 p.m., daily, except Sunday, C.  
Roxie Concert, 12:30 p.m., Sunday, B.  
Russian Symphonic Choir, 1:00 p.m., Sunday, R.  
Sous Les Ponts de Paris, 8:30 p.m., Saturday, R.  
Albert Spalding, 8:30 p.m., Wednesday, C.  
Trio Romantic, 6:00 p.m., Saturday, B.  
Waldorf-Astoria, 6:00 p.m., daily, except Sunday, R.

### DANCE BANDS

Leon Belasco, 11:30 p.m., Sunday, C.  
Ben Bernie, 9:00 p.m., and 12 Mid., Tuesday, R.  
Don Bestor, 8:00 p.m., Friday, B.  
Jack Denny, 7:00 p.m., Sunday, C.  
Eddie Duchin, 7:30 p.m., Thurs. and Sat. B.  
Ted Fiorito, 11:00 p.m., Wed.; 11:30 p.m., Sat., C.  
Jan Garber, 8:30 p.m., Sunday, B.  
Glen Gray, 10:00 p.m., Tues. and Thurs., C; 11:30 p.m.,  
Wed.; 12 mid., Sat., C.  
Phil Harris, 7:45 p.m., Tues.; 9:00 p.m., Fri. B.  
Richard Himber, 6:00 p.m., Tues.; 9:30 p.m., Thurs., B;  
6:30 p.m., Saturday, R.  
Isham Jones, 9:30 p.m., Mon.; 11:15 p.m., Wed.; 11:30  
p.m., Tues. and Fri., C.  
Henry King, 6:00 p.m., Thursday, B.  
Wayne King, 3:00 p.m., Sun.; 8:30 p.m., Tues. and Wed., R;  
10:00 p.m., Monday, C.  
Enoch Light, 6:30 p.m., Mon. and Wed., C.  
Guy Lombardo, 9:30 p.m., Wed.; 11:00 p.m., Sat., C.  
Abe Lyman, 2:30 p.m., Sun.; 11:30 p.m., Mon., C; 9:00 p.m.,  
Fri., R.  
Freddie Martin, 12:00 mid., Saturday, B.  
Benny Meroff, 10:00 p.m., Wednesday, B.  
Ozzie Nelson, 7:30 p.m., Sun., B; 11:30 p.m., Tues., C.  
George Olsen, 8:00 p.m., Saturday, R.  
Raymond Paige, 9:30 p.m., Thursday, C.  
Leo Reisman, 8:00 p.m., Tuesday, R.  
Jacques Renard, 6:00 p.m., Sunday, C.  
B. A. Rolfe, 10:00 p.m., Saturday, R.  
Nat Shilkret, 8:45 p.m., Tuesday, B.  
Rudy Vallee, 8:00 p.m., Thursday, R.  
Fred Waring, 8:30 p.m., Sunday, C.  
Mark Warnow, 10:45 p.m., Thursday, C.  
Ted Weems, 7:00 p.m., Sunday, B.  
Paul Whiteman, 10:00 p.m., Thursday, R.

### DIALOG

Fred Allen, 9:30 p.m. and 12:20 a.m., Wednesday, R.  
Amos 'n' Andy, 7:00 and 11:00 p.m., daily, except Sat. and  
Sun., B.  
Phil Baker, 9:30 p.m., Friday, B.  
Jack Benny, 10:00 p.m., Sunday, R.  
Burns and Allen, 9:30 p.m., Wednesday, C.  
Olsen and Johnson, 10:00 p.m., Friday, C.  
Jack Pearl, 8:00 p.m., Wednesday, R.  
Joe Penner, 7:30 p.m., Sunday, B.  
Potash and Permuter, 7:30 p.m., Mon., Wed., Fri., B.  
Stoopnagle and Budd, 9:15 p.m., Wed. and Sat., C.  
Ed Wynn, 9:30 p.m., Tuesday, R.

### DRAMA

Bar X Days, 2:00 p.m., Sunday, B.  
Billy Batchelor, 7:15 p.m., daily, ex. Sat. and Sun., R.  
Bobby Benson, 6:15 p.m., daily, except Sat. and Sun., C.  
Big Ben, 5:00 p.m., Sunday, R.  
Cruise of Seth Parker, 10:00 p.m., Tuesday, R.  
Dangerous Paradise, 8:30 p.m., Wed. and Fri., B.  
Death Valley Days, 9:00 p.m., Thursday, B.  
Dramatic Sketch, 7:15 p.m., Thurs. and Fri., B.  
Eno Crime Clues, 8:00 p.m., Tues. and Wed., B.  
First Nighter, 10:00 p.m., Friday, R.  
Goldbergs, 7:45 p.m., daily, ex. Sat. and Sun., R.  
Grand Hotel, 5:30 p.m., Sunday, B.  
Just Plain Bill, 7:15 p.m., daily, ex. Sat. and Sun., C.

Kay Seven, 10:30 p.m., Monday, R.  
Warden Lawes, 9:00 and 11:15 p.m., Wednesday, B.  
Little Italy, 6:45 p.m., Tues. and Thurs., C.  
March of Time, 8:30 p.m., Friday, C.  
Myrt and Marge, 7:00 and 10:45 p.m., daily, ex. Sat. and  
Sun., C.  
One Man's Family, 11:00 p.m., Saturday, R.  
Princess Pat Pageant, 4:30 p.m., Sunday, B.  
Red Davis, 8:45 p.m., Mon., Wed., Fri., B.  
Irene Ryan, 8:15 p.m., Sun., 7:45 p.m., Wed., B.  
Rin Tin Tin Thriller, 7:45 p.m., Sunday, C.  
Buck Rogers, 6:00 p.m., Mon. to Thurs., inc., C.  
Romances of Europe, 5:15 p.m., Sunday, R.  
Roses and Drums, 5:00 p.m., Sunday, C.  
Scott's Circus Days, 7:30 p.m., Fri. and Sat., R.  
Soconyland Sketches, 8:00 p.m., Monday, R.  
Talkie Picture Time, 5:30 p.m., Sunday, R.  
True Story Court, 7:00 p.m., Sunday, R.

### PIANO AND ORGAN

Fray and Braggiotti, 8:45 p.m., Tuesday, C.  
Archer Gibson, 10:30 p.m., Thursday, B.  
Gould and Shafter, 9:45 p.m., Sunday, B.  
Dion Kennedy, 4:00 p.m., Sunday, B.  
Ohman and Arden, 9:30 p.m., Sunday, R.

### POPULAR PROGRAMS

A. & P. Gypsies, 9:00 p.m., Monday, R.  
Album of Familiar Music, 9:30 p.m., Sunday, R.  
American Revue, 7:00 p.m., Sunday, C.  
Armour Program, 9:30 p.m., Friday, B.  
Major Bowes, 11:15 a.m., Sunday, R.  
Broadway Melodies, 2:00 p.m., Sunday, C.  
Buick Program, 9:15 p.m., Mon. and Thurs., C.  
Byrd Expedition, 10:00 p.m., Saturday, C.  
California Melodies, 9:30 p.m., Thursday, C.  
Camel Program, 10:00 p.m., Tues. and Thurs., C.  
Carborundum Band, 9:30 p.m., Saturday, C.  
Chase and Sanborn, 8:00 p.m., Sunday, R.  
Cheerio, 6:45 p.m., Tuesday, R.  
Chevrolet Program, 10:00 p.m., Sunday, R.  
Cities Service, 8:00 p.m., Friday, R.  
Contented Program, 10:00 p.m., Monday, R.  
Corn Cob Pipe Club, 10:00 p.m., Wednesday, R.  
Del Monte Ship of Joy, 9:30 p.m., Monday, R.  
Evening in Paris, 8:00 p.m., Sunday, C.  
F. O. B. Detroit, 10:30 p.m., Saturday, B.  
Fiddlers Three, 4:00 p.m., Sunday, R.  
Fitch Program, 7:45 p.m., Sunday, R.  
Fleischmann Hour, 8:00 p.m., Thursday, R.  
Forty-Five Minutes in Hollywood, 8:00 p.m., Saturday, C.  
Jack Frost's Melody, 9:30 p.m., Monday, B.  
Grenadier Guards, 2:30 p.m., Sunday, B.  
Gulf Headliners, 9:00 p.m., Sunday, B.  
Hall of Fame, 10:30 p.m., Sunday, R.  
Hollywood on the Air, 11:30 p.m., Saturday, R.  
Household Musical, 9:00 p.m., Tuesday, B.  
International Tid-Bits, 3:00 p.m., Sunday, B.  
Ipana Troubadours, 9:00 p.m., Wednesday, R.  
Manhattan Merry-Go-Round, 9:00 p.m., Sunday, R.  
Maxwell House Showboat, 9:00 p.m., Thursday, R.  
Molle Show, 7:00 p.m., Mon. and Wed., R.  
Music On the Air, 7:30 p.m., Mon., Wed. and Fri., C.  
Needle's Chocolaters, 8:00 p.m., Friday, B.  
Old Gold, 10:00 p.m., Wednesday, C.  
O'Leary's Irish Minstrels, 6:15 p.m., Saturday B.  
Pond's Program, 9:30 p.m., Friday, R.  
Pontia Program, 9:15 p.m., Wed. and Sat., C.  
Real Silk Show, 7:00 p.m., Sunday, B.  
Royal Gelatine, 8:00 p.m., Wednesday, R.  
Sealed Power Show, 8:00 p.m., and 12 mid., Monday, B.  
Seven Star Revue, 9:00 p.m., Sunday, C.  
Sinclair Minstrels, 9:00 p.m., Monday, B.  
Spartan Triolians, 3:30 p.m., Sunday R.  
Swift Revue, 10:00 p.m., Friday, C.  
Texaco Fire Chief, 9:30 p.m., Tuesday, R.  
U. S. Army Band, 6:00 p.m., Monday, B.  
Voice of America, 8:30 p.m., Thursday, C.

Voice of Firestone, 8:30 and 11:30 p.m., Monday, R.  
Wildroot Institute 4:15 p.m., Sunday, R.  
WLS Barn Dance, 11:00 p.m., Saturday, B.  
Yeast Foamers, 3:30 p.m., Sunday, B.

#### RELIGIOUS

Catholic Hour, 6:00 p.m., Sunday, R.  
Church of the Air, 1:00 p.m., Sunday, C.  
Elder Michaux, 7:00 p.m., Saturday, C.  
Mid-Week Hymn Sing, 6:30 p.m., Tuesday, R.  
National Vespers, 5:00 p.m., Sunday, B.  
National Youth Conference, 1:30 p.m., Sunday, B.  
Religion in News, 7:15 p.m., Saturday, R.  
Salt Lake Choir, 11:30 a.m., Sunday, C.

#### SINGERS

Frances Alda, 7:45 p.m., Monday, B; 6:00 p.m., Tuesday, R.  
Baby Rose Marie, 7:15 p.m., Monday, B.  
Mildred Bailey, 6:45 p.m., Mon.; 6:15 p.m., Saturday, C.  
Betty Barthell, 6:30 p.m., Tuesday, C.  
Irene Beasley, 6:30 p.m., Monday and Friday, R; 6:30 p.m., Wednesday, B.  
Boswell Sisters, 11:15 p.m., Monday and Friday, C.  
Morton Lowe, 7:45 p.m., Friday, B.  
Dell Campo, 11:15 p.m., Tuesday, C.  
Eddie Cantor, 8:00 p.m., Sunday, R.  
Charles Carlisle, 6:45 p.m., Sunday; 11:15 p.m., Thurs., C.  
Columbian, 8:00 p.m., Tuesday, C.  
Richard Crooks, 8:30 and 11:30 p.m., every other Mon., R.  
Bing Crosby, 8:30 p.m., Monday, C.  
Jessica Dragonette, 8:00 p.m., Friday, R.  
Morton Downey, 8:00 p.m., Thursday, C.  
Mary Eastman, 11:00 p.m., Friday, C.  
Evan Evans, 11:00 p.m., Monday, C.  
John Fogarty, 11:00 p.m., Sunday, B.  
Four Eton Boys, 9:30 p.m., Tuesday, C.  
Jane Froman, 9:00 p.m., Sunday, C.  
Connie Gates, 10:45 p.m., Thursday, C.  
Alex Gray, 8:30 p.m., Thursday, C.  
Tito Guizar, 12:30 p.m., Sunday; 6:30 p.m., Friday; 7:45 p.m., Saturday, C.  
Wendell Hall, 7:45 p.m., Sunday, R.  
Annette Hanshaw, 9:00 p.m., Thursday, R.  
Happy Bakers, 8:00 p.m., Monday, Wednesday, Friday, C.  
Harlem Serenade, 11:00 p.m., Tuesday, C.  
John Herrick, 7:15 p.m., Wednesday; 7:00 p.m., Sat., B.  
George Jessel, 9:30 p.m., Tuesday, C.  
Theo. Karle, 6:45 p.m., Wednesday, C.  
Frances Langford, 8:30 p.m., Sunday, R.  
Lazy Dan, 1:30 p.m., Sunday, C.  
Elizabeth Lennox, 2:30 p.m., Sunday, R.  
Little Jack Little, 11:00 p.m., Sunday, C.  
Howard Marsh, 9:15 p.m., Monday and Thursday, C.

### KEY TO SYMBOLS

Frequency is given in kilocycles; wavelength in meters. Night power is shown in watts in third column. Daytime power is shown in parenthesis in fourth column in kilowatts, thus (.25) indicating 250 watts. Some stations outside the United States use a "split frequency." Their exact frequency is shown in fourth column. Time Zones: A—Atlantic, E—Eastern, C—Central, M—Mountain, P—Pacific, L—Local. A. M. time is shown in light face type.

#### Second Column Symbols

- a Verifies reception for return postage.
- b Verifies only occasionally.
- c Does not verify.
- d Verification 100; letter 250.
- e Sends Ekko stamp for 10c.
- f Sends Ekko stamp for 5c.
- g Sends Ekko stamp for postage.
- h Sends own station stamp for 10c.
- i Sends own station stamp for 5c.
- j Sends own station stamp for postage.
- k Has no stamps.
- l No information available.

#### Fourth Column Symbols

- B National "Blue" network.
- C Columbia network.
- D Daytime only.
- Dn Daytime with occasional evening hours.
- E Trans-Canada network.
- F Canadian Radio Broadcast Commission.
- G All Canadian networks.

John McCormack, 9:30 p.m., Wednesday, B.  
Helen Morgan, 2:00 p.m., Sunday, C.  
Morin Sisters, 4:15 p.m., Sunday, B.  
Frank Munn, 9:30 p.m., Sunday; 9:00 p.m., Friday, R.  
Edith Murray, 6:30 p.m., Thursday, C.  
Gertrude Niesen, 9:30 p.m., Monday, C.  
Viola Philo, 11:00 p.m., Thursday, R.  
Virginia Rea, 9:30 p.m., Sunday, R.  
Vivien Ruth, 8:00 p.m., Monday, Wednesday, Friday, C.  
Sanderson-Crumit, 5:30 p.m., Sunday, C.  
Ethel Shutta, 8:00 p.m., Friday, B.  
Silver Dust Serenaders, 7:30 p.m., Tues., Thurs., Sat., C.  
Sixteen Male Voices, 10:15 p.m., Sat., B.  
Mary Small, 6:30 p.m., Saturday, B.  
Smiling Ed McConnell, 6:30 p.m., Sunday, C.  
Songs Mother Used to Sing, 6:00 p.m., Sunday, C.  
Southernaires, 6:45 p.m., Thursday, R.  
Irene Taylor, 10:00 p.m., Tuesday and Thursday, C.  
Conrad Thibault, 8:30 p.m., Wed., C; 9:00 p.m., Thurs., R.  
Lawrence Tibbett, 8:30 and 11:30 p.m., every other Mon., R.  
Trade and Mark, 8:45 p.m., Saturday, C.  
Cyrena Van Gordon, 8:30 p.m., Monday, B.  
Vee and Johnny, 4:15 p.m., Sunday, R.  
Ethel Waters, 7:00 p.m., Sunday, C.  
Lee Wiley, 9:30 p.m., Friday, R.  
Muriel Wilson, 2:45 p.m., Sunday, R.

#### TALKS

Back of the News, 6:30 p.m., Wednesday, R.  
Dale Carnegie, 1:30 p.m., Sunday, R.  
Boake Carter, 7:45 p.m., daily, ex. Sat. and Sun., C.  
Chicago Round Table, 12:30 p.m., Sunday, R.  
Columbia News Service, 10:30 p.m., daily, ex. Sunday, C.  
Conclave of Nations, 10:30 p.m., Sunday, C.  
Father Coughlin, 4:00 p.m., Sunday.  
Economics in New Deal, 8:00 p.m., Saturday, B.  
Flying Capt. Williams, 6:45 p.m., Saturday, B.  
Edwin C. Hill, 8:15 daily, ex. Sat. and Sun.; 11:30 p.m., Wed., Thurs., Fri., C.  
H. V. Kaltenborn, 7:30 p.m., Sunday; 6:00 p.m., Friday 10:45 p.m., Saturday, C.  
Andrew Kelly, 6:45 p.m., Monday, R.  
John B. Kennedy, 6:30 p.m., Thursday, R.  
Meet the Artist, 6:00 p.m., Saturday, C.  
National Radio Forum, 10:30 p.m., Wednesday, R.  
Our American Schools, 6:30 p.m., Sunday, R.  
Patri's Childhood, 10:00 p.m., Sunday, C.  
Radio in Education, 7:15 p.m., Tuesday, B.  
Lowell Thomas, 6:45 p.m., daily, except Sat. and Sun., B.  
Voice of Experience, 6:30 and 11:45 p.m., Tuesday, C.  
Frederic William Wile, 6:30 p.m., Saturday, C.  
Walter Winchell, 9:30 and 11:15 p.m., Sunday, B.  
Alexander Woolcott, 9:15 p.m., Tuesday and Friday, C.

As Shown in the Index by  
Frequencies and Dial Numbers

a-b-c. Small letters show stations using same transmitter  
1-2-3. Figures denote stations sharing time.  
..... No information.

### INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

#### 540 kilocycles 555.2 meters

CJRM z 1000 F  
CJRW ak 500 F  
XEY z 105 546.8

Moose Jaw, Sask. M  
Flerning, Sask. C—8:00-9:00; 10:00-10:45; 1:00-1:15; 2:15-2:30;  
5:30-7:30  
Merida, Yuc.

#### 550 kilocycles 545.1 meters

KFDY ae 500 1 (1)  
KFUO ae 500 2 (1)  
KFYR ah 1000 1N (2.5)  
KOAC ak 1000 .....  
KSD ak 500 2R  
TISO ak 250 .....  
WDEV ae 500 D  
WGR ae 1000 C  
WKRC ak 1000 C

Brookings, S. D. C—12:30-2:00  
St. Louis, Mo. C—7-8; 9:25-9:45; 12:15-12:45; 3-3:45; 10-11  
Bismarck, N. D. C—7:00-12:30; 2:00-11:30  
Corvallis, Ore. P—6:30-4:00; 6:30-9:00  
St. Louis, Mo. C—8-9:25; 9:45-12:15; 12:45-3; 3:45-10; 11-mid.  
San Jose, C. R. C—10:00-1:00; 4:00-11:00  
Waterbury, Vt. E—7:30-10:00; 11:30-2:00; 3:00-7:00  
Buffalo, N. Y. E—7:30-mid.  
Cincinnati, Ohio. E—7:00-1:00

#### 560 kilocycles 535.4 meters

KFDM ak 500 (1)  
KLZ ak 1000 C  
KTAB ak 1000 .....  
KTWO ak 500 D  
WFI ae 500 1R (1)  
WIND ak 1000 C  
WLIT ak 500 1R (1)  
WNOX ak 1000 C (2)  
WQAM ae 1000 CW  
XEAO ak 100 (.15)

Beaumont, Texas. C—7:00-10:00  
Denver, Colo. M—6:45-11:30  
San Francisco, Calif. P—7:00-1:00  
Springfield, Mo. C—7:00-7:00  
Philadelphia, Pa. E—6:45-9; 9:45-11; 1-2; 3-4:30; 6-mid.  
Gary, Ind. C—5:30-3:30  
Philadelphia, Pa. E—9-9:45; 11-1; 2-3; 4:30-6  
Knoxville, Tenn. C  
Miami, Fla. E—7:15-mid.  
Mexico, B. C. P—8:00-10:00

#### 570 kilocycles 526.0 meters

FON z 250 572  
KGKO ak 250 (.5)  
KMTR ak 500 .....  
KVI ak 500 .....  
WKBN ae 500 1C  
WMCA ak 500  
WNAX ak 1000 C (2.5)  
WOSU ae 750 1 (1)  
WSYR ak 250 B  
WWNC ae 1000 N

St. Pierre, Miquelon, Isl. A  
Wichita Falls, Texas. C—7:00-10:00  
Hollywood, Calif. P—6:00-12:15  
Tacoma, Wash. P—6:00-mid.  
Youngstown, Ohio. E—7:30-9:00; 11:00-1:00; 3:00-mid.  
New York, N. Y. E—8:00-1:00  
Yankton, S. D. C—6:00-mid.  
Columbus, Ohio. E—9-11; 1-3  
Syracuse, N. Y. E—7:30-1. (WSYU)  
Asheville, N. C. E—8:00-1:00

#### 580 kilocycles 516.9 meters

CKCL aj 100 M  
CKUA ak 500  
CMDD z 150 588  
HIX ak 1500 .....  
KMJ ak 500 CT  
KSAC ak 500 2 (1)  
WDBO ae 250 CW  
WIBW ae 1000 C2  
WOBW ae 750 .....  
WTAG ae 750 R  
XEPN ak 7500 585

Toronto, Ont. E—8:00-11:30 (CFCL)  
Edmonton, Alta. M  
Havana, Cuba. E  
Santo Domingo, D. R. E—8:10-10:30  
Fresno, Calif. P—7:00-mid.  
Manhattan, Kans. C—8:00-9:00; 10:00-10:30; 12:30-1:30; 4:30-5:30  
Orlando, Fla. E—7:00-mid.  
Topeka, Kans. C—6:00-mid.  
Charleston, W. Va. E—8-mid.  
Worcester, Mass. E—8-mid.  
Piedras Negras, Coah. C—6:00-8:00; 11:00-1:00; 7:00-11:00

#### 590 kilocycles 508.2 meters

CMW ae 1400 595  
KHQ ak 1000 N (2.5)  
WEEI ak 1000 R  
WKZO ae 1000 DK  
WOW ae 1000 R

Havana, Cuba. E—11:00-10:00  
Spokane, Wash. P—7-mid.  
Boston, Mass. E—6:45-1. (W1XAL)  
Kalamazoo, Mich. E—7:00-7:00  
Omaha, Neb. C—7:00-10:00; 10:45-3:15; 4:00-mid.

#### 600 kilocycles 499.7 meters

CFCF ae 500 F  
CFCO ak 50 FL  
CJOR ak 500 .....  
KFQD ak 250 .....  
KFSD ah 1000 N  
WCAC ae 250 2  
WCAO ae 250 C  
WICC ae 250 2 CH (.5)  
WMT af 500 C  
WREC ak 500 C (1)

Montreal, Que. E—7:30-mid. (VE9DR)  
Chatham, Ont. E—7:15-10  
Vancouver, B. C. P—7:30-10:30  
Anchorage, Alaska. L—6:00-mid.  
San Diego, Calif. P—7:30-mid.  
Storrs, Conn. E—12:30-1; 7-8  
Baltimore, Md. E—7:00-mid.  
Bridgeport, Conn. E—7:45-1:00  
Waterloo, Iowa. C—6:00-mid.  
Memphis, Tenn. C—6:30-mid.



# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

## 610 kilocycles 491.5 meters

KFRC	ae	1000	CT	San Francisco, Calif.	P-7-mid.
KZEG	ak	1000	618.5	Manila, P. I.	L-7:30-12:15; 1:15-5:00
KZRM	ak	50000	618.5	Manila, P. I.	L-6:30-7:30; 12:15-1:15; 5:10-10:30
TIXA	z	7.5	614	San Jose, C. R.	
WDAF	ak	1000	R	Kansas City, Mo.	C-7:56-12:30
WIP	ae	500	C (1)	Philadelphia, Pa.	E-8:30-12:30
WJAY	ak	500	D	Cleveland, Ohio.	E-6-sunset

## 620 kilocycles 483.6 meters

KGW	ae	1000	NJ	Portland, Ore.	P-7:00-mid.
KTAR	ae	500	NJ (1)	Phoenix, Ariz.	M-7:00-11:15
WFLA	ae	1000	Na (2.5)	Clearwater, Fla.	E-7:30-1:00
WLBZ	ak	500	C	Bangor, Maine.	E
WSUN	ae	1000	Na (2.5)	St. Petersburg, Fla.	E-7:30-1:00
WTMJ	ae	1000	N (2.5)	Milwaukee, Wis.	C-6:45-1:00

## 630 kilocycles 475.9 meters

CFCY	ae	500	FVE	Charlottetown, P. E. I.	A-12:00-1:30; 6:00-11:30
CJGX	ck	500	F	Yorkton, Sask.	C-8:30-9:15; 10:30-11:45; 12:40-1:15; 7:30-9:00
CMQ	z	500	2	Havana, Cuba.	E
KFRU	ak	500	D	Columbia, Mo.	C-6-9; 4-sunset; 7-9
KGFX	z	200	D	Pierre, S. D.	C-9:30-sunset
WGBF	ae	500	I	Evansville, Ind.	C
WMAL	ak	250	B (5)	Washington, D. C.	E-6:45-mid.
WOS	ak	500	ID	Jefferson City, Mo.	C-9:00-4:0
XBX	z	50	.....	Monterrey, N. L.	
XEZ	ak	500	.....	Merida, Yuc.	C-1-5
XFG	z	2000	638.3	Mexico City, F.	C

## 640 kilocycles 468.5 meters

KFI	ak	50000	IN	Los Angeles, Calif.	P-6:30-mid.
WAIU	ae	500	I	Columbus, Ohio.	E-6:15-5:45
WOI	ae	5000	D	Ames, Iowa.	C-6:30-11:30; noon-1:45; 3:30-5:00

## 650 kilocycles 461.3 meters

KPCB	ae	100	.....	Seattle, Wash.	P-5:30-sunset; 10-4
WSM	aej	50000	N	Nashville, Tenn.	C-6:30-mid.

## 660 kilocycles 454.3 meters

RUS	z	500	664	San Salvador, E. S.	
WAAW	af	500	D	Omaha, Neb.	C-6:00-sunset
WEAF	ak	50000	R	New York, N. Y.	E-8:00-1:00

## 670 kilocycles 447.5 meters

WMAQ	ck	5000	N	Chicago, Ill.	C-7:30-1:00
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## 680 kilocycles 440.9 meters

CMAF	ak	1000	.....	Havana, Cuba.	E-5:30-11:30
HJN	ak	500	681	Bogota, Colombia.	L-Noon-1:30; 7-9
KFEQ	ae	2500	D	St. Joseph, Mo.	C-9:30-4:50
KPO	ak	50000	N	San Francisco, Calif.	P-7:30-mid.
VAS	z	2000	685	Glance Bay, N. S.	A-1:00-1:15; 1:00-1:15
WPTF	ae	1000	DnN	Raleigh, N. C.	E-7:30-sunset

## 690 kilocycles 434.5 meters

CFRB	ak	10000	C	Toronto, Ont.	E-8:00-mid.
CJJC	ak	100	.....	Calgary, Alta.	M
NAA	ak	1000	.....	Arlington, Va.	E-11:55-noon; 9:55-10:00
XET	ck	500	.....	Monterrey, N. L.	C-Noon-2:00; 4:00-10:00

## 700 kilocycles 428.3 meters

WLW	ak	50000	NX	Cincinnati, Ohio.	E-6:30-2. (W8XO; W8XAL)
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## 710 kilocycles 422.3 meters

KMPC	ae	500	Dn	Beverly Hills, Calif.	P-6:45-12:30
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With Tuesday's Time on the Air

TIFB	z	30	714	San Jose, C. R.	C-6:00-10:00
WOR	ak	5000	.....	Newark, N. J.	E-6:45-12:30
XEN	ak	1000	711	Mexico City, D. F.	C-9:00-noon; 1:00-4:00; 5:00-mid.

## 720 kilocycles 416.4 meters

WGN	ck	50000	.....	Chicago, Ill.	C-7:00-1:30
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## 730 kilocycles 410.7 meters

CFPL	z	100	F	London, Ont.	E
CJCA	ah	1000	F	Edmonton, Alta.	M
CKAK	ak	5000	C	Montreal, Que.	E-7:30-11:30
CMK	ae	3150	.....	Havana, Cuba.	E-11:00-1:00; 7:00-mid.
XEF	.....	.....	.....	.....	.....
XER	ak	150000	735	Villa Acuna, Coah.	C-7:15-5:00

## 740 kilocycles 405.2 meters

KMMJ	ae	1000	D	Clay Center, Neb.	C-5:00-sunset
WHBB	ak	250	D	Portsmouth, N. H.	E-8:30-1:30; 3:30-7:45
WSB	ah	50000	NX	Atlanta, Ga.	C-6:55-mid.

## 750 kilocycles 399.8 meters

KGU	aj	2500	N	Honolulu, T. H.	L-6:30-10:30
WJR	ak	10000	B	Detroit, Mich.	E-7:00-1:00
XEOK	ak	5000	757	Tijuana, B. C.	P-7:00-mid.

## 760 kilocycles 394.5 meters

CMBS	ak	200	765	Havana, Cuba.	E-10:00-3:30-6
KXA	ae	250	(5)	Seattle, Wash.	P-5:30-mid.
WBAL	ae	10000	BSy	Baltimore, Md.	(See 1060 Kcys.)
WEW	ae	1000	D	St. Louis, Mo.	C-8-sunset
WJZ	ck	50000	BSy	New York, N. Y.	E-8-1. (W3XL; W3XAL)
XEYZ	z	10000	.....	Mexico City, D. F.	C

## 770 kilocycles 389.4 meters

CMCQ	z	1000	775	Havana, Cuba.	E
KFAB	ae	5000	CSy	Lincoln, Neb.	C-5:00-6:45; 9:00-mid.
WBBM	ae	25000	CSy	Chicago, Ill.	C

## 780 kilocycles 384.4 meters

CHWK	ak	100	F	Chilliwack, B. C.	P-9:00-10:00; 12:00-1:00; 5:30-8:30
CJCS	ae	500	(1) P	Sudbury, Ont.	E-8:00-mid.
CKPR	ak	50	FE	Fort William, Ont.	E-10-2; 5-11
KELW	ae	500	2	Burbank, Calif.	P-10:00-1:00; 5:00-8:00; 4:00-6:00
KTM	ae	500	2 (1)	Los Angeles, Calif.	P-6:00-10:00; 1:00-5:00; 8:00-4:00
WEAN	ae	500	CH	Providence, R. I.	E-7:30-1:00
WMC	ak	500	N (1)	Memphis, Tenn.	C-7:00-mid.
WTAR	ae	500	C	Norfolk, Va.	E-7:00-mid.
XEP	z	1000	.....	Mexico City, D. F.	C

## 790 kilocycles 379.5 meters

CMJK	ak	500	.....	Camaguey, Cuba.	E-11:30-12:30; 5:00-11:00
KGO	ak	7500	N	San Francisco, Calif.	P-7:00-mid.
WGY	ak	50000	R	Schenectady, N. Y.	E-6:45-1. (W2XAD; W2XAF)

## 800 kilocycles 374.8 meters

TIGP	z	75	.....	San Jose, C. R.	
VOAC	z	40	.....	St. John's, Newfoundland.	L
WBAP	ak	50000	Na	Fort Worth, Tex.	C-6:30-7; 8:30-10:30; 12:30-3; 5:30-6:30; 7-10
WFAA	ak	50000	Na	Dallas, Tex.	C-7-8:30; 10:30-12:30; 3-5:30; 6:30-7; 10-mid.
XFC	z	350	805	Aguascalientes, Ags.	

## 810 kilocycles 370.2 meters

VOAS	ak	100	.....	St. John's, Nfld.	L-11:00-12:30; 4:00-5:30
WCCO	ae	50000	C	Minneapolis, Minn.	C-7:00-mid.
WNYC	ak	500	N	New York, N. Y.	E-10:00-7:30

## 820 kilocycles 365.6 meters

CMGC	z	30	.....	Matanzas, Cuba.	E
WHAS	aj	50000	C	Louisville, Ky.	C-7:00-mid.

KCYS.  
820  
DIAL

CUT OUT ON DOTTED LINES

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## 830 kilocycles 361.2 meters

CMC	ae	500	835	Havana, Cuba.	E-10:30-11:30; 7:00-11:00
CMGA	z	100	834	Colon, Cuba.	E
KOA	ak	12500	N	Denver, Colo.	M-7:00-mid.
LRS	z	20000	.....	Buenos Aires, Arg.	L
TIEA	z	7.5	833	San Jose, C. R.	L
WEEU	ak	1000	D	Reading, Pa.	E-8:00-6:15
WHDH	ae	1000	Dn	Boston, Mass.	E-7:00-sunset in Denver
WRUF	ae	5000	Dn	Gainesville, Fla.	E-8:00-7:00
XETW	dk	500	.....	Mexico City, D. F.	C-Noon-11:00

## 840 kilocycles 356.9 meters

CJOC	ak	100	F	Lethbridge, Alta.	M-7:30-8:00
CKLW	ae	5000	C	Windsor, Ont.	E-7:00-1:00
XFX	ak	500	.....	Mexico City, D. F.	C-7:12-30; 6:30-10:00

## 850 kilocycles 352.7 meters

KIEV	ak	100	D	Glendale, Calif.	P-6:00-sunset
KWKH	ae	10000	1	Shreveport, La.	C
WWL	ae	10000	1Dn	New Orleans, La.	C-8:00-8:30

## 860 kilocycles 348.6 meters

TIVL	z	30	869	San Jose, C. R.	C-11:00-1:00; 7:00-10:00
WABC	ae	50000	C	New York, N. Y.	E-7:30-2:00 (WBOQ) (W2XE)
WHB	ae	500	D	Kansas City, Mo.	C-6:00-6:00
XETH	ak	100	.....	Puebla, Pue.	C-8:30-11:00; 1:00-3:00; 6:30-11:00

## 870 kilocycles 344.6 meters

CMCF	ak	250	873	Havana, Cuba.	E-5:00-8:00; 9:00-11:00
CMX	ae	1000	875	Havana, Cuba.	E-Noon-2:00; 8:00-9:00
WENR	ak	50000	Na	Chicago, Ill.	C-(W9XF)
WLS	ae	50000	Na	Chicago, Ill.	C-5:30-9:15; 10:45-2:30; 6:00-7:30

## 880 kilocycles 340.7 meters

CJCB	ak	50	F	Sydney, N. S.	A-10:00-11:00; noon-2:00; 5:00-10:00
CRCO	ak	1000	F	Ottawa, Ont.	E-Noon-1:30; 5:30-11:30
KFKA	ak	500	2 (1)	Greeley, Colo.	M-6:00-7:30; 9:00-2:30; 4:30-6; 8-mid.
KLX	ae	1000	.....	Oakland, Calif.	P-8:00-11:00
KPOF	ae	500	2	Denver, Colo.	M-7:30-9:00; 2:30-4:00; 6:00-8:00
WCOC	ae	500	(1)	Meridian, Miss.	C-7:30-2:00; 5:00-10:30
WGBI	ae	250	1	Scranton, Pa.	E-9:30-12:30; 1:30-4:30; 5:30-8:00
WQAN	ae	250	1	Scranton, Pa.	E-9:00-9:30; 12:30-1:30; 4:30-5:30; 8-11:00
WSUI	ae	500	.....	Iowa City, Iowa.	C-9:00-10:00; 11:00-12:30; 2:00-4:00; 6:00-10:00
YV2BC	z	100	882	Caracas, Venez.	L

## 890 kilocycles 336.9 meters

KARK	ak	250	.....	Little Rock, Ark.	C-7:00-2:30; 4:30-9:00
KKNF	ak	500	2 (1)	Shenandoah, Iowa.	C-5:00-10:00; 11:00-5:00; 6:00-10:00
KSEI	ck	250	(.5)	Pocatello, Idaho.	M-7:30-11:00
KUSD	ae	500	2	Vermillion, S. D.	C-Silent
WGST	ae	250	C (1)	Atlanta, Ga.	C-7:00-mid.
WILL	ak	250	2 (1)	Urbana, Ill.	C-10:00-12:15; 5:00-6:00
WJAR	ae	500	R	Providence, R. I.	E-8:00-mid.
WMMN	ae	250	(.5)	Fairmont, W. Va.	E-7:00-9:30
XETU	z	100	.....	Pachuca, Hdo.	

## 900 kilocycles 333.1 meters

KGBU	ak	500	.....	Ketchikan, Alaska.	L
KHJ	ak	1000	CT	Los Angeles, Calif.	P-7:00-1:00
VOWR	ak	500	S	St. John's, Nfld.	L-Silent
WBEN	ae	1000	R	Buffalo, N. Y.	E-6:45-Mid.
WJAX	ae	1000	N	Jacksonville, Fla.	E-7:00-12:30
WKY	ak	1000	N	Oklahoma City, Okla.	C-6:45-mid.
WLBL	ae	2500	D	Stevens Point, Wis.	C-8:00-sunset

## 910 kilocycles 329.6 meters

CKY	ak	5000	F	Winnipeg, Man.	C-8:30-1:30; 4:00-11:00
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CMCD	ah	500	915	Havana, Cuba.	E-Noon-9:00
CMJF	z	200	.....	Camaguey, Cuba	E
CRCM	ck	5000	F	Montreal, Que.	E
TICR	z	75	911	San Jose, C. R.	C-6:30-10:00
XBW	ak	5000	.....	Mexico City, D. F.	C

## 920 kilocycles 325.9 meters

CMDB	z	150	925	Havana, Cuba.	E
HHK	ae	1000	.....	Port-au-Prince, Haiti.	E-Silent
KFEL	ak	500	1	Denver, Colo.	M-6:30-8:30; 10:00-12:30; 3:00-4:30; 6-7:30; 9-Mid.
KFXF	ak	500	1	Denver, Colo.	M-8:30-10; 12:30-3; 4:30-6; 7:30-9:00; mid.-1:00
KOMO	ak	1000	N	Seattle, Wash.	P-6:55-mid.
KPRC	ae	1000	N (2.5)	Houston, Texas.	C-6:30-mid.
WAAF	ak	500	D	Chicago, Ill.	C-6:00-sunset
WBSO	ae	500	D	Babson Park, Mass.	E-8:30-5:15
WWJ	ae	1000	R	Detroit, Mich.	E-7:30-mid.

## 930 kilocycles 322.4 meters

CFAC	ak	100	.....	Calgary, Alta.	M
CFCH	ak	100	F	North Bay, Ont.	E-Noon-1:30; 5:30-mid.
CFCL	ae	100	.....	Prescott, Ont.	E-8:00-10:00; noon-2:00; 5:00-10:00
CHRC	ak	100	F	Quebec, Que.	E-9:00-12:30
CKPC	ae	100	FG	Brantford, Ont.	E-6:45-mid.
KFWI	ak	500	1	San Francisco, Calif.	P-Silent till further notice
KGBZ	ak	500	2 (1)	York, Neb.	C-5-6; 7:30-9:30; 11-12:30; 2-3:30; 5-6:30; 8-30-mid.
KMA	ak	500	2 (1)	Shenandoah, Iowa.	C-6-7:30; 9:30-11; 12:30-2; 3:30-5; 6:30-8:30
KROW	ak	500	1 (1)	Oakland, Calif.	P-7:00-mid.
WBRC	ak	500	C (1)	Birmingham, Ala.	C-7:00-11:00
WDBJ	ae	250	C (.5)	Roanoke, Va.	E-8:00-mid.

## 940 kilocycles 319.0 meters

CMHD	dk	500	945.5	Caibarien, Cuba.	E-8:00-9:00
KOIN	ak	1000	CT	Portland, Ore.	P-6:30-mid.
WAAT	ae	300	D	Jersey City, N. J.	E-6:00-6:00
WAVE	ak	1000	.....	Louisville, Ky.	C-Silent
WCSH	ae	1000	R (2.5)	Portland, Maine.	E-8:00-mid.
WDAY	ae	1000	N	Fargo, N. D.	C-7:00-mid.
WHA	ak	1000	D	Madison, Wis.	C-8:00-sunset
XEFO	ak	5000	.....	Mexico City, D. F.	C-1:00-3:00; 6:25-mid. (XEO)

## 950 kilocycles 315.6 meters

KFWB	ak	1000	.....	Hollywood, Calif.	P-7:30-12:30
KGHL	ak	1000	NJ (2.5)	Billings, Mont.	M-8:00-11:00
KMEC	ak	1000	C	Kansas City, Mo.	C-6:00-mid.
VOGY	ak	75	.....	St. John's, Nfld.	L-10:30-11:30; 1:00-2:00; 6:15-8:00
WRC	ae	500	R	Washington, D. C.	E-6:30-1:00

## 960 kilocycles 312.3 meters

CMDB	z	250	965	Havana, Cuba.	E-6:00-11:00
CMCW	ak	150	965	Havana, Cuba.	E-1:00-3:00; noon-6:00
CMJL	z	50	.....	Camaguey, Cuba.	
CRCT	ak	5000	NF	Toronto, Ont.	E-6:45-mid. (VE9GW)
XEAW	ak	10000	965	Reynosa, Tams.	C-5:00-1:00
YVIBC	ak	5000	.....	Caracas, Venez.	L-11:00-1:30; 5:30-10:15

## 970 kilocycles 309.1 meters

CMGF	ak	100	971.5	Mantanzas, Cuba.	E-3:00-5:00; 8:00-10:30
KJR	z	5000	N	Seattle, Wash.	P-7:30-mid.
WCFL	ae	1500	BX	Chicago, Ill.	C-7:00-mid. (W9XAA)
WIBG	ae	100	D	Glenside, Pa.	E-9:00-sunset

## 980 kilocycles 303.9 meters

KDKA	ak	50000	B	Pittsburgh, Pa.	E-7:00-1:00. (W8XX)
XEAE	ak	800	.....	Tijuana, B. C.	P-9:00-mid.
XEFE	z	100	985	Nuevo Laredo, Tams.	C

## 990 kilocycles 302.8 meters

TITV	z	7.5	999	San Jose, C. R.	C-3:00-5:00; 7:00-11:00
WBZ	ak	50000	BSy	Boston, Mass.	E-7:00-1:00. (W1XAZ)
WBZA	ak	1000	BSy	Springfield, Mass.	E-7:00-1:00
WJEM	z	500	D	Tupelo, Miss.	C

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XEAF z 750 ..... Nogales, Son.  
XEX ak 100 ..... Mexico City, D. F. C—11:00-4:00; 6:00-2:00

**1000 kilocycles 299.8 meters**

CMBZ ak 150 1005 Havana, Cuba. E—11-1; 4-6; 8:30-11  
KFVD ae 250 Dn Los Angeles, Calif. P—6:30-sunset; 10:00-mid.  
WHO- ak 50000 R Des Moines, Iowa. C—7:00-mid.  
WOC ak 1000 D York, Pa. E—8:00-6:45  
WORK ak 250 ..... Guadalajara, Jal. C—8:30-9:00; 6:00-11:00  
XEA z 50 ..... Toluca, D. F. C  
XEC ak 100 ..... Monterrey, N. L. C—11:00-2:00; 7:00-10:00  
XEFJ ak 40 ..... Queretaro, Qro. C—8:00-10:00  
XEFs ak 40 ..... Saltillo, Coah. C—10:30-1:00; 6:00-9:00  
XEL ak 40 .....

**1010 kilocycles 296.9 meters**

CHML aei 50 M Hamilton, Ont. E—8:00-11:00  
CHWC ae 500 3F Regina, Sask. M—7-9; 10-11; noon-1; 3:30-6:30  
CKCD ak 100 ..... Vancouver, B. C. P—7:30-11:30  
CKCK ak 500 3F Regina, Sask. M—9-10; 11-noon; 1-3:30; 5:30-11  
CKCO z 100 ..... Ottawa, Ont. E  
CKIC ak 50 ..... Wolfville, N. S. A—Noon-1:00; 6:00-7:00  
CKWX aeh 100 L Vancouver, B. C. P—7-7:30  
CMJO ak 50 ..... Ciego de Avila, Cuba. E—9:00-1:00; 6:00-10:00  
KGGF ak 500 2 (1) Coffeyville, Kans. C—7:30-2; 3:45-7:15  
KQW ae 500 ..... San Jose, Calif. P—7:00-8:00; 9:00-3:00; 4:30-10:00  
TIGA z 30 1014 Cartago, C. R.  
WHN ae 250 1 New York, N. Y. E—1:30-5:30  
WIS ae 500 N (1) Columbia, S. C. E—8:00-mid.  
WNAD ae 500 2 Norman, Okla. C—7:15-9:15  
WPAP ae 250 1 New York, N. Y. E—11-1  
WQAO ae 250 1 New York, N. Y. E—Silent  
WRNY ae 250 1 New York, N. Y. E—9:30-1:30; 5:30-11  
XEXJ ak 500 1015 Juarez, Chih. C  
XEU ak 100 ..... Veracruz, Ver. C—7:00-9:00; 10:00-2:00; 5:00-11:00

**1020 kilocycles 293.9 meters**

KYW ae 10000 NY Chicago, Ill. C—8:00-1:00  
WRAX ak 250 DZ Philadelphia, Pa. E—7:00-7:00  
XES dk 250 ..... Tampico, Tams. E—10:00-2:30; 5:00-10:00

**1030 kilocycles 291.1 meters**

CFCN ak 10000 F Calgary, Alta. M—7:30-1:30; 5:00-11:00  
CFNB ae 500 FE Fredericton, N. B. A—8:30-9:30; 12:30-2:00; 7:30-10:00  
CKNC ak 100 F Toronto, Ont. E—8-11. (VE9CB)  
CMHI ak 250 1037 Santa Clara, Cuba. E—11:00-noon; 8:00-9:00  
CMKC z 150 1034 Santiago, Cuba. E  
XEB ak 10000 ..... Mexico City, D. F. C—9:30-10:00

**1040 kilocycles 288.3 meters**

CMGH ak 15 Matanzas, Cuba. E—2:00-3:00; 5:00-6:00; 7:30-8:30  
KRLD ae 10000 iC Dallas, Texas. C  
KTHS ae 10000 DN Hot Springs, Ark. C  
WESG ak 1000 D Elmira, N. Y. E—8:00-6:00  
WKAR ak 1000 D East Lansing, Mich. E

**1050 kilocycles 285.5 meters**

CHNS ae 500 FL Halifax, N. S. A—8:00-1:30; 6:00-mid.  
CMBG z 225 1052a Havana, Cuba. E  
CMCB ak 150 1052a Havana, Cuba. E  
CMJG z 50 ..... Camaguey, Cuba. E  
KFBI ak 5000 Dn Abilene, Kans. C—6:00-sunset  
KNX ak 25000 ..... Hollywood, Calif. P—6:45-11:00  
XEFC ak 100 ..... Merida, Yuc. C—7-10

**1060 kilocycles 282.8 meters**

KWJJ ak 500 ..... Portland, Ore. P—6:00-8:00; 9:00-2:00  
WBAL ae 10000 iB Baltimore, Md. E—3-mid.  
WJAG ak 1000 D Norfolk, Neb. C—6:45-sunset  
WTIC ak 50000 iR Hartford, Conn. E—7:30-3

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**1070 kilocycles 280.2 meters**

KJBS ae 100 D San Francisco, Calif. P—12:01-sunset  
WCAZ ae 50 D Carthage, Ill. C  
WDZ ak 100 D Tuscola, Ill. C—8:00-4:00  
WTAM ck 50000 R Cleveland, Ohio. E—6:30-1:00

**1080 kilocycles 277.6 meters**

VOKW z 30 1085 St. John's, Nfld. L—Noon-2:00  
WBT ae 50000 CU Charlotte, N. C. E—7:00-mid.  
WCBG ae 5000 1Dn Zion, Ill. C—7:30-10:30; 1:30-sunset  
WMBI ae 5000 1Dn Chicago, Ill. C—7:00-7:30; 10:30-1:30; 3:00-4:00  
XEFG ak 500 1085 Mexico City, D. F. C—10:30-4:00; 7:00-mid.

**1090 kilocycles 275.1 meters**

KMOX ak 50000 C St. Louis, Mo. C—6:30-12:30  
XEAI z 100 ..... Mexico City, D. F. (All mail returned)

**1100 kilocycles 272.6 meters**

CMCU ak 500 ..... Havana, Cuba. E—Noon-6  
CRCV ak 1000 F Vancouver, B. C. P—Noon-1; 5:30-11  
KGDm ak 250 D Stockton, Calif. P—6-sunset  
TIRCA ak 500 ..... San Jose, C. R. C—11:00-1:00; 5:00-10:30  
WLWL ae 5000 1 New York, N. Y. E—6:00-8:00  
WPG ak 5000 1C Atlantic City, N. J. E—9:00-6:00; 8:00-1:00  
XEWV z 250 ..... Veracruz, Ver. C

**1110 kilocycles 270.1 meters**

KSOO ae 1000 Dn (2.5) Sioux Falls, S. D. C—6:00-6:30  
WRVA ae 5000 N Richmond, Va. E—7:00-mid.  
XENT ak 150000 1115 Nuevo Laredo, Tams. C—6:00-8:00; 10:00-2:00; 5:00-10:00

**1120 kilocycles 267.7 meters**

CFTP z 100 ..... Edmonton, Alta. M  
CHGS ae 50 F Summerside, P. E. I. A—7:30-8:30; 10:30-2; 4:30-11  
CHLP z 100 ..... Montreal, Que. E—9:00-mid.  
CKOC ae 500 F (1) Hamilton, Ont. E—7:45-11:30  
CMHJ ae 60 1125 Cienfuegos, Cuba. E—11:00-2:00; 6:00-9:00  
KFIO ae 100 D Spokane, Wash. P—7:00-sunset  
KFSG ag 500 a Los Angeles, Calif. P—6:30-7:15; 7:30-mid.  
KRKD ae 500 a Los Angeles, Calif. P—7:45-7:30  
KRSC ak 100 D Seattle, Wash. P—6:45-6:30  
KTRH z 1000 2C Houston, Texas. C—6:30-11:30  
WDEL ak 250 (.5) Wilmington, Del. E—9:00-10:00  
WHAD ak 250 1C Milwaukee, Wis. C—9:30-10:15; 3:00-4:00; 8:30-9:30  
WISN ak 250 1 Milwaukee, Wis. C  
WTAW ae 500 2 College Station, Tex. C—8-9

**1130 kilocycles 265.3 meters**

KSL ae 50000 C Salt Lake City, Utah. M—6:45-mid.  
WJJD ae 20000 Dn Chicago, Ill. C—6:30-10:00  
WOW ag 1000 D New York, N. Y. E—8:00-6:00  
XEH ak 250 1132 Monterrey, N. L. C—8:00-1:30; 5:00-10:00

**1140 kilocycles 263.0 meters**

CMBJ z 500 ..... Havana, Cuba. E—8-11; 7-11  
CMBW ak 600 ..... Havana, Cuba. E—6-11  
KVOO ae 25000 iN Tulsa, Okla. C—6:30-9  
WAPI ae 5000 iN Birmingham, Ala. C—6:00-sunset; 9:00-mid.

**1150 kilocycles 260.7 meters**

CMJH ak 50 ..... Ciego de Avila, Cuba. E—8:00-8:30; 10:00-3:00; 5:30-10:30  
WHAM ae 50000 B Rochester, N. Y. E—8:00-mid.  
XED ak 500 1155 Guadalajara, Jal. C—Noon-3:30; 7:00-mid.

**1160 kilocycles 258.5 meters**

WOWO ae 10000 1C Fort Wayne, Ind. C—8:30-5:15; 7:30-10  
WWVA ae 5000 1C Wheeling, W. Va. E—6:30-8:30; 10-mid.

KCYS.

1160

DIAL

CUT OUT ON DOTTED LINES



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## 1170 kilocycles 256.3 meters

CMJE z 50 ..... Camaguey, Cuba. E  
WCAU ae 50000 C ..... Philadelphia, Pa. E-8:00-1:00 (W3XAU)

## 1180 kilocycles 254.1 meters

CMBN ak 150 1185 Havana, Cuba. E  
CMCJ ak 500 ..... Havana, Cuba. E-7:53:00; 8-mid.  
KEX ak 5000 2N Portland, Ore. E-7:53:00; 8-mid.  
KOB ak 10000 2 Albuquerque, N. M. M-7:00-1:00; 5:00-9:00  
WDGY ak 1000 Dn Minneapolis, Minn. C-6:30-8:15  
WINS ae 500 ..... New York, N. Y. E-6:00-7:00  
WMAZ ak 500 ..... Macon, Ga. E-7:30-3:00; 5:00-8:15

## 1190 kilocycles 252.0 meters

HUJ z 15 1195 Santo Domingo, D. R. E-12:30-2:30; 6:30-8:30  
VE9BK ak 10 1195 Montmagny, Que. E  
VONF ak 400 1195 St. John's, Nfld. L-Noon-2:00; 6:00-9:00  
WQAI ae 50000 N San Antonio, Texas. C-6:30-11:30  
WSAZ ak 1000 ..... Huntington, W. Va. E-8:00-8:00

## 1200 kilocycles 249.9 meters

CHAB ak 100 F Moose Jaw, Sask. M-5:30-7  
CJAT ak 50 ..... Trail, B. C. P-9:30-9  
CKTB ae 100 G St. Catharines, Ont. E  
CMGB z 30 1205 Matanzas, Cuba. E  
CMHW z 100 ..... Cienfuegos, Cuba. E  
KBTM ak 100 DT Jonesboro, Ark. C-7:30-1:30; 2:30-5:30  
KERN ak 100 CT Bakersfield, Calif. P-7:00-mid.  
KFJB ak 100 (.25) Marshalltown, Iowa. C-6:00-9:00; noon-3:00; 6:00-9:00  
KFJD ak 100 ..... Nampa, Idaho. M-7:00-9:00  
KFJX ak 100 ..... Grand Junction, Colo. M  
KGDE ak 100 (.25) Fergus Falls, Minn. C-7:00-9:00  
KGEK ak 100 ..... Yuma, Colo. M-11:30-1:30; 7:15-8:45  
KGFJ ak 100 ..... Los Angeles, Calif. P-24 hours  
KGHI ak 100 (.25) Little Rock, Ark. C-7:00-1:00; 4:00-10:00  
KGVO ak 100 ..... Missoula, Mont. M-8:00-8:30  
KMLB ak 100 ..... Monroe, La. C  
KSUN ae 100 D Lowell, Ariz. M-Sunrise-sunset  
KVOS ak 100 ..... Bellingham, Wash. P-7:00-10:00  
KWG ae 100 CT Stockton, Calif. P-7:00-mid.  
WABI ak 100 ..... Bangor, Maine. E-9:00-2:00; 6:00-10:00  
WBBX ak 100 1 New Orleans, La. C-Noon-5:00; 8:00-11:00  
WBBZ ak 100 ..... Ponca City, Okla. C-6:30-9  
WBHS z 100 4 Huntsville, Ala. C  
WCAT ak 100 D Rapid City, S. D. C-12:30-1:30  
WCAX ak 100 ..... Burlington, Vt. E-Noon-1  
WCLO ak 100 ..... Janesville, Wis. C-7:30-2:00; 5:00-8:30  
WFAM ak 100 8C South Bend, Ind. C-6:30-mid.  
WFBC ak 100 4 (.25) Greenville, S. C. E-7:30-2:30; 5:30-10:30  
WFBE ak 100 (.25) Cincinnati, Ohio. E-7:00-11:30  
WHBC ak 100 2 Canton, Ohio. E-7:00-9:00; noon-3:00; 6:00-9:00  
WHBY ak 100 ..... Green Bay, Wis. C-7:30-9:45  
WIBX ae 100 (.3) Utica, N. Y. E-8:00-11:00  
WIL ak 100 8 (.25) St. Louis, Mo. C-7:00-mid.  
WJBC ae 100 6 LaSalle, Ill. C-8-9; 10-12:30; 3-6:30  
WJBL ae 100 6 Decatur, Ill. C-6:30-8; 9-10; 12:30-3; 6:30-10  
WJBW ak 100 1 New Orleans, La. C-8:00-noon; 5:00-8:00  
WKBO ak 100 3 Harrisburg, Pa. E-7:00-10:00; 2:00-5:00; 7:00-11:00  
WKJC ae 100 3 Lancaster, Pa. E-11:00-3:00; 6:00-9:00  
WLAP ae 100 (.25) Louisville, Ky. C-7:30-11:30  
WNBW ae 100 2 Silverhaven, Pa. E-9:00-noon; 3:00-6:00; 9:00-mid.  
WPHR z 10 (.1) Carbondale, Pa. E  
WRBL z 100 (.25) Petersburg, Va. E-8:00-5:00; 6:00-9:00  
WRBL z 100 ..... Columbus, Ga. C-7:00-11:00  
YV3BC ae 100 8 Hammond, Ind. C-7-8:30; 11-1; 4-5; 6-mid.  
10-AK ak 100 ..... Caracas, Venez. L-11:00-2:00; 5:00-10:30  
10-BP ak 15 ..... Stratford, Ont. E-Noon-1:00; 5:30-7:00  
10-BQ ak 15 ..... Wingham, Ont. E-Noon-1  
10-BU z 15 ..... Brantford, Ont. E-11-8  
Canora, Sask. C

## 1210 kilocycles 247.8 meters

CFBO z 100 F St. John, N. B. A  
CHNC ak 100 PF New Carlisle, Que. A-1:00-mid.  
CKBI ak 100 ..... Prince Albert, Sask. M

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CKCH z 100 ..... Hull, Que. E  
CKMC ak 50 ..... Cobalt, Ont. E  
CKOV ak 50 F Kelowna, B. C. P  
KASA ak 100 ..... Elk City, Okla. C-6:30-1:30; 5:00-7:00  
KDLR ak 100 ..... Devils Lake, N. D. C-8:00-2:15; 6:00-8:00  
KFJI ak 100 ..... Klamath Falls, Ore. P-8:30-9:00  
KFOR ak 100 (.25) Lincoln, Neb. C-7:00-10:00  
KFPW ak 100 ..... Fort Smith, Ark. C-7:00-2:00; 5:00-10:00  
KFVS ae 100 6 Cape Girardeau, Mo. C-9-noon; 4-7:30; 9-mid.  
KFXM ak 100 9 San Bernardino, Calif. P-6-mid.  
KGCX ak 100 ..... Watertown, S. D. C-7:00-3:00; 5:00-9:00  
KGY ak 100 ..... Olympia, Wash. P-7-7  
KIEM ak 100 ..... Eureka, Calif. P-7:45-sunset  
KPPC ak 50 9 Pasadena, Calif. P-Silent  
KWEA z 100 ..... Shreveport, La. C  
KWVW z 100 ..... Hilo, Hawaii. L  
WALR ae 100 ..... Zanesville, Ohio. E  
WBAX ae 100 1 Wilkes Barre, Pa. E  
WBBL ak 100 7S Richmond, Va. E-Silent  
WCBS ak 100 2 Springfield, Ill. C-11:15-3:00; 6:45-9:00  
WCRW ae 100 4 Chicago, Ill. C-11:00-2:00; 5:00-7:00  
WEBQ ae 100 6 Harrisburg, Ill. C-6-9; noon-4; 7:30-9  
WEDC ae 100 4 Chicago, Ill. C-8:30-10:00; 3:30-5; 7-8; 10-11; mid.-2:00  
WFAS ak 100 3 White Plains, N. Y. E-9-11; 9-mid.  
WGBB ae 100 3 Freeport, N. Y. E-7-9  
WGCN ae 100 (.25) Mississippi City, Miss. C-9:00-1:00; 7:00-9:00  
WGNV ak 100 ..... Chester, N. Y. E  
WHBF ak 100 ..... Rock Island, Ill. C-7:30-10:00  
WHBU ah 100 ..... Anderson, Ind. C-7-10  
WTBU a 100 ..... Poyntette, Wis. C  
WJBI ak 100 3 Red Bank, N. J. E-4-7  
WJBY ak 100 ..... Gadsden, Ala. C-9:00-9:00  
WJEJ ah 100 D Hagerstown, Md. E-7:00-1:00; 4:00-7:45  
WJW ak 100 ..... Akron, Ohio. E-9:00-11:30  
WKFI ak 100 Y Greenville, Miss. C-7:00-7:00  
WKOK ak 100 1P Sunbury, Pa. E  
WMBG ak 100 7C Richmond, Va. E-7:00-mid.  
WOCL ak 50 ..... Jamestown, N. Y. E-Noon-mid.  
WOMT ae 100 ..... Manitowoc, Wis. C  
WPRO ak 100 ..... Providence, R. I. E-9:00-2:00; 4:00-11:15  
WQDX ae 100 ..... Thomasville, Ga. E-8:00-9:00  
WSBC ae 100 4 Chicago, Ill. C-6:00-8:30; 10:00-11:00; 2:00-3:30; 8:00-10:00; 11:00-mid.  
WSEN ak 100 ..... Columbus, Ohio. E-8:00-mid.  
WSIX ak 100 ..... Springfield, Tenn. C-6:00-4:00; 6:00-9:00  
WSOC ae 100 N Charlotte, N. C. E  
WTAX ae 100 2 Springfield, Ill. C  
XETZ z 500 ..... Mexico City, D. F. C

## 1220 kilocycles 245.8 meters

CMHK ak 50 1225 Cruces, Cuba. E-10:00-11:30  
KFKU ae 500 a Lawrence, Kans. C-2:30-3:00; 6:00-6:15  
KTW ak 1000 S2 Seattle, Wash. P-Silent  
KWSC ae 1000 2 (2) Pullman, Wash. P-6:45-8; 10:30-9:30  
WCAD ae 500 D Canton, N. Y. E-12:30-1:30  
WCAE ae 1000 R Pittsburgh, Pa. E-6:45-1:00  
WDAE ae 1000 CW Tampa, Fla. E-8:00-mid.  
WREN ak 1000 Ba Lawrence, Kas. C-7:00-mid.

## 1230 kilocycles 243.8 meters

CFQC z 500 F Saskatoon, Sask. C  
CMBY z 250 2 Havana, Cuba. E  
CMCA z 150 2 Havana, Cuba. E  
KGGM ak 250 (.5) Albuquerque, N. M. M-6:00-noon; 4:00-8:00  
KYA ae 1000 N San Francisco, Calif. P-7:30-mid.  
WFBM ae 1000 1C Indianapolis, Ind. C-7:30-10:15; noon-3:00; 5:30-11:30  
WNAC ak 1000 CH Boston, Mass. E-6:30-1:00  
WSBT ak 500 1C South Bend, Ind. C-6:30-mid.

## 1240 kilocycles 241.8 meters

CMAB z 20 1249 Pinar del Rio, Cuba. E  
CMJN z 50 ..... Camaguey, Cuba. E  
KGCU ak 250 1 Mandan, N. D. M-Noon-5:00; 6:45-9:00  
KLPM ak 250 1 Minot, N. D. C-7:00-1:00; 6:00-7:45  
KTAT ak 1000 C Fort Worth, Texas. C-7:00-mid.

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KTFI	ae	1000	.....	Twin Falls, Idaho.	M—6:00-mid.
WKAO	ae	1000	.....	San Juan, P. R.	A—12:15-3:15; 6:30-10:00
WXYZ	ak	1000	K	Detroit, Mich.	E—7:30-mid.

## 1250 kilocycles 239.9 meters

KFOX	ae	1000	.....	Long Beach, Calif.	P—6:00-mid.
WCAL	ah	1000	2	Northfield, Minn.	C—9:45-10:15; 8:00-10:00
WDSU	ak	1000	C	New Orleans, La.	C—7:00-11:45
WGCP	ak	1000	1 (2.5)	Newark, N. J.	E—2:00-5:00; 8:00-10:00
WLB	ak	1000	2	Minneapolis, Minn.	C—8-9
WNEW	ae	1000	(2.5)	Newark, N. J.	E—7-2; 5-8; 10-mid.
WRHM	ak	1000	2	Minneapolis, Minn.	C—6:15-9:45; 10:35-8; 9-mid.
XEFA	z	500	.....	Mexico City, D. F.	C

## 1260 kilocycles 238.0 meters

KOIL	ak	1000	B	Council Bluffs, Iowa.	C—6:00-1:00
KRGV	ak	500	1	Harlingen, Texas.	C—7:00-9:30; 12:30-3:30; 6:30-9:30
KUOA	ak	1000	.....	Fayetteville, Ark.	C—7:00-6:30
KVOA	ak	500	.....	Tucson, Ariz.	M—6:00-9:00; noon-3:00; 6:00-9:00
KWWG	z	500	1	Brownsville, Tex.	C—Silent till April 1st
WLBW	ae	500	C(1)	Erie, Pa.	E—8:00-1:00
WNBX	ak	250	D	Springfield, Vt.	E—7:30-sunset
WTOC	ae	500	C	Savannah, Ga.	E—7:00-1:00
XEFI	ak	250	.....	Chihuahua, Chih.	C—1:00-3:00; 8:00-10:30

## 1270 kilocycles 236.1 meters

CMBC	ae	150	1	Havana, Cuba.	E
CMCP	z	150	1	Havana, Cuba.	E
KGCA	ak	100	2D	Decorah, Iowa.	C—8:30-9:45; 10:45-11:30; 12:30-2:30
KOL	ae	1000	CT	Seattle, Wash.	P—6:45-mid.
KVOR	ae	1000	C	Colorado Springs, Colo.	M—7:00-11:00
KWLC	ak	100	2D	Decorah, Iowa.	C—7:30-8:30; 9:45-10:45; 11:30-12:30; 2:30-3:30
WASH	ak	500	Ka	Grand Rapids, Mich.	E—7:00-mid.
WBR	ae	500	R	Baltimore, Md.	E—7:10-1:00
WJDX	ae	1000	N	Jackson, Miss.	C—7:00-11:00
WOOD	ak	500	Ka	Grand Rapids, Mich.	E—7:00-mid.

## 1280 kilocycles 234.2 meters

KFB	ae	1000	(2.5)	Great Falls, Mont.	M—8:00-3:00; 5:00-10:00
WCAM	ae	500	1	Camden, N. Y.	E—2-5
WCAP	ae	500	1	Asbury Park, N. J.	E—9-1; 8-mid.
WDOD	ae	1000	C(2.5)	Chattanooga, Tenn.	C—7:00-11:00
WIBA	ae	500	N(1)	Madison, Wis.	C—7:30-mid.
WORC	ak	500	CH	Worcester, Mass.	E—8:00-mid.
WRR	ak	500	C	Dallas, Texas.	C—7:00-11:00
WTNJ	ak	500	1	Trenton, N. J.	E—1:00-2:00; 5:00-8:00
XEFW	ak	70	.....	Tampico, Tams.	E—8:00-10:00; noon-2:00; 5:00-6:00; 7:00-10

## 1290 kilocycles 232.4 meters

CMHL	ak	20	.....	Cienfuegos, Cuba.	E—10:00-noon; 6:00-9:00
KDYL	ae	1000	NJ	Salt Lake City, Utah.	M—6:30-1:00
KLCN	z	100	D	Blytheville, Ark.	C
KTSA	ak	1000	C	San Antonio, Texas.	C—7:00-mid.
WEBC	ae	1000	N(2.5)	Superior, Wis.	C—7:00-mid.
WJAS	ak	1000	C(2.5)	Pittsburgh, Pa.	E—7:30-12:30
WNBZ	z	50	D	Saranac Lake, N. Y.	E
XEAC	z	100	1295	San Luis Potosi, S. L. P.	
XFB	ak	1000	.....	Jalapa, Ver.	C—8:00-9:00; 1:00-2:30; 8:00-11:30
.....	z	500	P	San Juan, P. R.	

## 1300 kilocycles 230.6 meters

CMKJ	z	20	.....	Guantanamo, Cuba.	E
HIZ	z	10	.....	Santo Domingo, D. R.	L
KALE	ak	500	3CT	Portland, Ore.	P—7:00-10:30; 2:30-5:00; 6:00-7:00
KFAC	ae	1000	.....	Los Angeles, Calif.	P—7:00-mid.
KFH	ak	1000	C2	Wichita, Kans.	C—7:30; 9-11; 11:30-2; 3-11
KFJR	ag	500	3	Portland, Ore.	P—10:30-2:30; 5-6; 7-11
WBR	aej	1000	1	Brooklyn, N. Y.	E—6:00-7:00; 10:00-noon; 6:00-8:00
WEVD	ak	500	1	New York, N. Y.	E—Silent
WFAB	ae	1000	1	New York, N. Y.	E—9:00-10:00; noon-3:00; 9:00-10:00
WHAZ	ae	500	1	Troy, N. Y.	E—Silent
WIOD	ae	1000	N	Miami, Fla.	E—7:15-mid. (W4XB)
WOQ	ae	1000	2	Kansas City, Mo.	C—6-7; 8:35-9:05; 11-11:30; 2-3; 11-mid.

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## 1310 kilocycles 228.9 meters

CFJC	ak	100	FLE	Kamloops, B. C.	P—7:30-10:30; noon-2:00; 6:00-7:30
CHCK	ak	50	.....	Charlottetown, P. E. I.	A—Noon-1:30
CJL	z	100	.....	Kirkland Lake, Ont.	E
CJLS	z	100	.....	Yarmouth, N. S.	A
KCKV	ak	50	.....	Quebec, Que.	E—Noon-2:00; 6:30-11:00
KCRJ	ak	100	D	Jerome, Ariz.	M—7:30-9:30; noon-1:00; 4:30-6:00
KFBK	ak	100	C	Sacramento, Calif.	P—7:00-11:00
KFGQ	ak	100	7	Boone, Iowa.	C
KEPL	ak	100	.....	Dublin, Texas.	C—6:30-8:30; 9:00-3:15; 7:00-10:45
KFP	ae	15	.....	Greenville, Texas.	C—7:45-9:00; 1:00-2:45; 6:00-9:00
KFXR	ak	100	(25)	Oklahoma City, Okla.	C—7:30-2:00; 4:30-11:00
KFOY	ak	100	(25)	Lubbock, Texas.	C—7:00-2:00; 4:00-10:00
KGBX	ae	100	.....	Springfield, Mo.	C
KGCX	ak	100	(25)	Wolf Point, Mont.	M—7:30-9:00; 11:30-3:00; 6:00-7:00
KGEZ	aj	100	.....	Kalispell, Mont.	M—8:00-9:00
KGFW	ak	100	.....	Kearney, Neb.	C—7:00-9:00
KIFH	z	100	.....	Juneau, Alaska.	L
KIT	ak	100	.....	Yakima, Wash.	P—7:00-11:00
KMED	ck	100	.....	Medford, Ore.	P—8:00-8:00
KRMD	ak	100	.....	Shreveport, La.	C—7:00-1:00; 5:00-8:00
KTSM	ak	100	a	El Paso, Texas.	M—7:00-1:30; 3:00-10:00
KXRO	ak	100	.....	Aberdeen, Wash.	P—7:30-10:00
WAML	ak	100	.....	Laurel, Miss.	C—7:00-10:00; 11:00-2:00; 4:00-7:00
WBEO	ae	100	.....	Marquette, Mich.	C—9:30-1:15; 5:00-7:00
WBOW	ak	100	.....	Terre Haute, Ind.	C—7:00-11:00
WBRE	ak	100	.....	Wilkes Barre, Pa.	E—8:00-11:30
WCLS	ae	100	b	Joliet, Ill.	C—9:30-1:00; 5:00-8:00
WDAH	ck	100	Sa	El Paso, Texas.	M—Silent
WBR	aej	100	(25)	Buffalo, N. Y.	E—7:00-1:00
WEXL	ak	50	.....	Royal Oak, Mich.	E—7:30-5:00
WFBG	ae	100	3	Altoona, Pa.	E—10:30-4:30; 7:00-10:00
WDF	ak	100	K	Flint, Mich.	E—7:00-mid
WGAL	ae	100	5	Lancaster, Pa.	E—9:30-2:30; 4:30-6:00
WGH	ae	100	.....	Newport News, Va.	E—7:00-1:00; 5:00-11:00
WHAT	ak	100	4	Philadelphia, Pa.	E—9:00-11:00; 1:00-2:00; 8:30-mid.
WIAS	ak	100	7	Ottumwa, Iowa.	C—7:00-11:00
WJAC	ae	100	3	Johnstown, Pa.	E—9:00-10:30; 4:30-7:00
WKBC	ak	100	(2.5)	Birmingham, Ala.	C—7:00-10:00
WLBC	ak	100	6	Muncie, Ind.	C—7:00-10:00
WMBO	ak	10	.....	Auburn, N. Y.	E—9:00-9:00
WNBH	ae	100	(25)	New Bedford, Mass.	E—8:00-2:00; 4:00-10:00
WOL	ae	100	.....	Washington, D. C.	E—7:00-mid.
WRAW	ak	100	5	Reading, Pa.	E—7:00-9:30; 6:00-mid.
WROL	ak	100	.....	Knoxville, Tenn.	C—7:00-1:00; 4:00-11:00
WSAJ	ae	100	.....	Grove City, Pa.	E—7:15-8:15
WSJS	ak	100	C	Winston-Salem, N. C.	E—7:45-mid.
WTEL	ah	100	4	Philadelphia, Pa.	E—7:00-9:00; noon-1:00; 5:00-8:30
WTJS	ak	100	(25)	Jackson, Tenn.	C—7:00-2:00; 4:00-10:00
WTRC	ak	50	6 (1)	Elkhart, Ind.	C—6:00-7:30
XEFB	ak	100	1315	Monterrey, N. L.	C—11:00-2:00; 6:00-11:00
XBI	ak	250	.....	Morelia, Mich.	C—2:00-3:30; 9:00-10:00

## 1320 kilocycles 227.1 meters

CMCY	ak	500	1325	Havana, Cuba.	E
KGHF	ak	250	(5)	Pueblo, Colo.	M—6:30-9:30
KGMB	ak	250	C	Honolulu, T. H.	L—6:00-11:00
KID	ae	250	(5)	Idaho Falls, Idaho.	M—6:00-11:00
WADC	ae	1000	C	Akron, Ohio.	E—8:00-mid.
WSMB	ak	500	N	New Orleans, La.	C—7:00-mid.

## 1330 kilocycles 225.4 meters

CMJI	ak	45	1335	Ciego de Avila, Cuba.	E
KGB	agj	1000	CT	San Diego, Calif.	P—7:00-1:00
KMO	ak	250	.....	Tacoma, Wash.	P—6:45-11:00
KSCJ	aj	1000	1C(2.5)	Sioux City, Iowa.	C—7:30-11:00
WDR	ae	1000	CH	Hartford, Conn.	E—8:00-mid.
WSAI	ak	1000	R(2.5)	Cincinnati, Ohio.	E—8:00-mid.
WTAQ	ae	1000	1C	Eau Claire, Wis.	C—7:00-8:00

## 1340 kilocycles 223.7 meters

KFPY	ak	1000	C	Spokane, Wash.	P—6:45-mid.
KGDY	ak	250	.....	Huron, S. D.	C
KGNO	ak	250	.....	Dodge City, Kans.	C—6:30-9:00
WCOA	ae	500	.....	Pensacola, Fla.	E—9:00-10:00
WLBC	z	250	(5)	Portland, Maine.	E—(Mail returned)
WSPD	ae	1000	C	Toledo, Ohio.	E—7:00-1:00

KCYs.

1340

DIAL

CUT OUT  
ON DOTTED LINES

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## 1350 kilocycles 222.1 meters

KIDO	ak	1000	.....	Boise, Idaho.	M—8:00-9:30
KWK	ak	1000	B	St. Louis, Mo.	C—7:00-mid.
TGW	ak	500	.....	Guatemala City, Gua.	L—Noon-1:00; 6:00-7:00; 9:00-11:00
WAWZ	ae	250	1	Zarephath, N. J.	E—7:45-8:45; 5:00-6:30
WBNX	ae	250	1	New York, N. Y.	E—6:00-7:30; 9:00-1:00
WEHC	ae	500	D	Charlottesville, Va.	E

## 1360 kilocycles 220.4 meters

CMJP	ak	75	.....	Moron, Cuba.	E—10:00-noon; 8:00-10:00
KGER	ak	1000	.....	Long Beach, Calif.	P—6:00-mid.
KGIR	ak	500	N(1)	Butte, Mont.	M—7:00-mid.
WCSC	ae	500	.....	Charleston, S. C.	E—8:00-10:30; noon-2:00; 7:00-10:00
WFBL	ak	1000	C(2.5)	Syracuse, N. Y.	E—8:00-1:00
WGES	ae	500	.....	Chicago, Ill.	C—5:45-11:00; 5:00-8:00
WQBC	ak	500	.....	Vicksburg, Miss.	C

## 1370 kilocycles 218.8 meters

CHPR	z	100	.....	St. John, N. B.	A
CMCN	z	250	1375	Havana, Cuba.	E
CMCR	ak	150	1375	Havana, Cuba.	E—Noon-1:00; 4:00-6:00; 8:00-9:00
CMGE	z	30	1375	Cardenas, Cuba.	E
KCRK	ak	100	2(.25)	Enid, Okla.	C—6:00-9:00; 11:00-2:00; 5:00-7:45; 10:00-mid.
KFBL	ae	50	3	Everett, Wash.	P—9:00-noon; 3:00-6:00; 9:00-mid.
KFJM	ak	100	.....	Grand Forks, N. D.	C—7:00-9:00
KFJZ	ae	100	.....	Fort Worth, Texas.	C—7:00-11:00
KGAR	ae	100	(.25)	Tucson, Ariz.	M—7:00-9:00
KGFG	bk	100	2	Oklahoma City, Okla.	C
KGFL	ak	100	4	Roswell, N. M.	M—6:00-9:30; 2:00-7:30
KGKL	ak	100	.....	San Angelo, Texas.	C—8:00-4:30; 6:00-10:00
KICA	z	100	4	Clovis, N. M.	M—9:30-2:00; 7:30-9:30
KLUF	z	100	.....	Galveston, Texas.	C
KMAC	ak	100	5	San Antonio, Texas.	C—7:00-8:30; 10:00-11:00; noon-1:30; 4:00-6:00; 7:00-8:00; 10:00-12:30
KONO	ak	100	5	San Antonio, Texas.	C—6:00-7:00; 8:00-10:00; 11:00-noon; 1:30-4:00; 6:00-7:00; 8:00-10:00
KOOS	ae	100	.....	Marshfield, Ore.	P—7:00-9:00
KRE	ak	100	.....	Berkeley, Calif.	P—6:30-9:30; noon-3:00; 6:00-9:00
KSO	ak	100	B(.25)	Des Moines, Iowa.	C—6:30-1:00
KUJ	ak	100	.....	Walla Walla, Wash.	P—6:45-9:00
KVL	ak	100	3	Seattle, Wash.	P—6:00-9:00; noon-3:00; 6:00-9:00; mid.-1:30
KWKC	z	100	.....	Kansas City, Mo.	C
WBTM	ak	100	7	Danville, Va.	E—11:00-1:00; 6:30-10:00
WCBM	ae	100	(.25)	Baltimore, Md.	E—7:00-mid.
WDAS	ae	100	(.25)	Philadelphia, Pa.	E—9:00-11:00
WGL	ae	100	C	Fort Wayne, Ind.	C—6:30-mid.
WGCL	ak	100	C	Hudson Falls, N. Y.	E—7:30-mid.
WHBD	ak	100	.....	Mount Orab, Ohio.	E—8:00-11:30; noon-9:00
WHBQ	ak	100	.....	Memphis, Tenn.	C—7:55-2:00; 4:00-10:30
WHDF	ak	100	(.25)	Calumet, Mich.	E—7:00-9:00; 11:30-1:30; 5:30-8:30
WHET	ak	100	.....	Dothan, Ala.	C—9:00-sunset
WIBM	ae	100	1K	Jackson, Mich.	E—7:30-9:00
WJBK	ae	50	1	Detroit, Mich.	E—7:00-sunset; 9:00-mid.
WJTL	ae	100	.....	Atlanta, Ga.	E
WLEY	ak	100	(.25)	Lexington, Mass.	E—Noon-3:00; 6:00-9:00
WLVA	ck	100	7	Lynchburg, Va.	E—7:00-11:00; 1:00-6:30
WMBR	ak	100	.....	Tampa, Fla.	E—7:00-9:30
WPFB	ak	100	.....	Hattiesburg, Miss.	C
WQDM	ae	100	D	St. Albans, Vt.	E
WRAK	ak	100	.....	Williamsport, Pa.	E—8:30-3:00; 5:00-10:30
WRAM	ae	100	.....	Wilmington, N. C.	E—7:30-mid.
WRDO	ae	100	.....	Augusta, Maine.	E—9:00-1:00; 4:30-8:30
WRJN	ae	100	.....	Racine, Wis.	C—9:00-2:30; 4:00-10:30
WSVS	ak	50	D	Buffalo, N. Y.	E—8:30-10:00; 2:00-3:00
XEFZ	ae	100	.....	Mexico City, D. F.	C

## 1380 kilocycles 217.3 meters

CMJC	z	150	1382	Camaguey, Cuba.	E
KOH	ak	500	C	Reno, Nev.	P—8:00-10:00
KQV	ak	500	2C	Pittsburgh, Pa.	E—7:00-10:30
TGX	z	75	.....	Guatemala City, Guatemala.	
WKBH	ae	1000	C	LaCrosse, Wis.	C—7:30-10:00
WSMK	ak	200	2	Dayton, Ohio.	E—7:00-8:00; 10:00-mid.
XETB	z	125	.....	Torreón, Coah.	

## 1390 kilocycles 215.7 meters

CJRC	z	100	.....	Middlechurch, Man.	C
HIH	ak	15	1395	San Pedro de Macoris, D. R.	L—12:15-2:00
KLRA	ae	1000	C	Little Rock, Ark.	C—7:00-mid.
KOY	ae	500	(1)	Phoenix, Ariz.	M
WHK	ae	1000	C(2.5)	Cleveland, Ohio.	E—7:00-mid.

## 1400 kilocycles 214.2 meters

KLO	ah	500	C	Ogden, Utah.	M—8:30-10:30
KTUL	z	250	(.5)	Tulsa, Okla.	C
WARD	ak	500	2	Brooklyn, N. Y.	E
WBAA	z	500	1	Lafayette, Ind.	C—Silent
WBBC	ae	500	2	Brooklyn, N. Y.	E—7:11:30; 6:7-30
WKBF	ak	500	1N	Indianapolis, Ind.	C—6:00-mid.
WLTH	ak	500	2	Brooklyn, N. Y.	E—11:30-1:30; 7:30-9
WVFW	ak	500	2	Brooklyn, N. Y.	E
XEFW	ae	100	.....	Jaurex, Chih.	C—9:00-3:00; 5:00-11:00

## 1410 kilocycles 212.6 meters

CKFC	ak	50	5	Vancouver, B. C.	P—3:4:30; 8:30-10:30
CKMO	z	100	5	Vancouver, B. C.	P—7:30-3; 4:30-11
CMCH	ak	50	.....	Havana, Cuba.	E
CMCM	z	15	.....	Havana, Cuba.	E
KFLV	ak	500	4	Rockford, Ill.	C—9:12:30; 4-6; 8:30-mid.
KGRS	ae	1000	1	Amarillo, Texas.	C—6-8; 10:12:30; 3-4:30; 6-7; 9-10
WAAB	ae	500	CH	Boston, Mass.	E—8:30-mid.
WBCM	ae	500	K	Bay City, Mich.	E—8:00-mid.
WDAG	ae	1000	1	Amarillo, Texas.	C—8-10; 12:30-3; 4:30-6; 7:30-9; 10-mid.
WHBL	ae	500	4	Sheboygan, Wis.	C—7-10; 12:30-3; 6-8; 10-mid.
WHIS	ak	250	2	Bluefield, W. Va.	E—7:00-9:00; noon-3:00; 6:00-8:00
WODX	ae	500	3C	Mobile, Ala.	C—7:00-6:15; 7:45-10:30
WRBX	ae	250	2	Roanoke, Va.	E
WSFA	ck	500	3C	Montgomery, Ala.	C—6:00-7:45

## 1420 kilocycles 211.1 meters

CKGB	z	100	.....	Timmons, Ont.	E
KABC	ak	100	.....	San Antonio, Texas.	C—6:00-mid.
KBPS	aj	100	4	Portland, Ore.	P—11:00-12:30; 3:00-5:00
KCMC	ak	100	.....	Texarkana, Ark.	C—7:00-2:00; 4:00-9:00
KFIJ	ak	100	.....	Fond du Lac, Wis.	C—10:00-1:00; 4:00-10:00
KGFF	ak	100	.....	Shawnee, Okla.	C—7:30-3:00; 5:00-9:00
KGGC	ak	100	.....	San Francisco, Calif.	P—9:00-1:00; 4:00-9:00
KGIW	ak	100	1	Alamosa, Colo.	M
KGIX	ak	100	.....	Las Vegas, Nev.	M
KICK	z	100	.....	Carter Lake, Iowa.	C—(Mail returned)
KIDW	z	100	1	Lamar, Colo.	M—8:00-10:00; 7:00-10:00
KORE	ae	100	.....	Eugene, Ore.	P—7:45-9:00
KUMA	ak	100	.....	Yuma, Ariz.	M—7:00-9:00; 11:00-2:00; 6:00-10:00
KWCR	ak	100	B(.25)	Cedar Rapids, Iowa.	C—7:00-mid.
KXL	ae	100	4	Portland, Ore.	P—7:00-1:00
WACO	ak	100	C	Waco, Texas.	C—8:00-2:00; 5:00-10:30
WAGM	ae	100	.....	Presque Isle, Maine.	E—11:00-1:00; 4:00-7:00
WAMC	ae	100	.....	Annisston, Ala.	C—7:00-9:00
WAZL	ak	100	.....	Hazleton, Pa.	E—11:00-9:00
WEED	ak	100	D	Greenville, N. C.	E—9:00-6:00
WEHS	ak	100	a	Cicero, Ill.	C—4:00-6:00
WELL	ak	50	.....	Battle Creek, Mich.	E—9:00-9:30
WENC	ak	100	DY	Americus, Ga.	C—7-6:15
WHDL	ae	100	D	Tupper Lake, N. Y.	E
WHFC	ae	100	a	Cicero, Ill.	C—7:00-1:30; 6:00-9:00; 11:00-1:00
WILM	aj	100	2	Wilmington, Del.	E—7:00-11:00; 2:00-5:00; 9:00-mid.
WJBO	z	100	D	Baton Rouge, La.	C
WJMS	ak	100	.....	Ironwood, Mich.	C—7:30-1:30; 4:30-7:00
WKBI	ak	100	a	Cicero, Ill.	C—1:30-4:00
WLBF	ak	100	.....	Kansas City, Kans.	C—7:00-11:00
WMAS	ak	100	CH(.25)	Springfield, Mass.	E—8:00-mid.
WMBC	ag	100	(.25)	Detroit, Mich.	E—7:30-mid.
WMBH	ak	100	(.25)	Joplin, Mo.	C—7:30-2:00; 6:00-9:30
WNRA	ak	100	D	Muscle Shoals, Ala.	C—7:00-10:00
WPAD	ak	100	.....	Paducah, Ky.	C
WSPA	ae	100	(.25)	Spartanburg, S. C.	E—7:30-2:00; 4:00-9:30
WTBO	ae	100	(.25)	Cumberland, Md.	E—9:00-7:00

## 1430 kilocycles 209.7 meters

KECA	ak	1000	N	Los Angeles, Calif.	P—7:00-11:00
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# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

KGNF	ak	500	D	North Platte, Neb.	C—7:00-sunset
WBAK	ak	500	1 (1)	Harrisburg, Pa.	E
WCAH	ae	500	1C	Columbus, Ohio.	E—8:00-mid.
WFEA	ae	500	CH	Manchester, N. H.	E—7:30-11:00
WHEC	ae	500	C	Rochester, N. Y.	E
WHP	ak	500	1C(1)	Harrisburg, Pa.	E—8:30-10:30; 11:30-1:30; 2:30-4:00; 4:30-1:00
WNBR	ae	500	.....	Memphis, Tenn.	C—8:00-1:00; 3:00-10:00
WOKO	ae	500	C	Albany, N. Y.	E—7:30-1:00

## 1440 kilocycles 208.2 meters

CMBL	ak	200	1445	Havana, Cuba.	E—Mail returned
KDFN	ak	500	.....	Casper, Wyo.	M—7:30-2:00; 3:30-9:00
KLS	ae	250	D	Oakland, Calif.	P—8:00-sunset
KXYZ	ak	250	.....	Houston, Texas.	C—6:30-1:00; 2:30-11:00
TIFS	z	7.5	1441	Cartago, C. R.	L
WBIG	ae	500	C (1)	Greensboro, N. C.	E—8:00-11:00
WCBA	ae	250	a	Allentown, Pa.	E—7:30-mid.
WMBD	ae	500	3C (1)	Peoria, Ill.	C—6:00-11:00; 8:00-mid.
WSAN	aj	250	a	Allentown, Pa.	E—7:30-mid.
WTAD	ak	500	3	Quincy, Ill.	C—11:00-8:00

## 1450 kilocycles 206.8 meters

CFCT	ae	50	.....	Victoria, B. C.	P—8:00-12:30; 6-8; mid.-2:00
CKX	ak	500	F	Brandon, Man.	C—7:00-10:30
KTBS	ck	1000	N	Shreveport, La.	C—7:00-mid.
TIEP	z	7.5	.....	San Jose, C. R.	L
WGAR	ak	500	B (1)	Cleveland, Ohio.	E—6:30-1:00
WHOM	ae	250	.....	Jersey City, N. J.	E—8:00-mid.
WSAR	ae	250	.....	Fall River, Mass.	E—8:00-3:30; 5:00-10:00
WTFI	ak	500	.....	Athens, Ga.	E—8:00-9:00
XEAB	ak	7.5	.....	Neuvo Laredo, Tams.	C—10:00-3:00; 4:00-7:00

## 1460 kilocycles 205.4 meters

IKSTP	ae	10000	N (25)	St. Paul, Minn.	C—6:45-12:30
WJSV	ak	10000	C	Washington, D. C.	E—6:30-mid.

## 1470 kilocycles 204.0 meters

KGA	ak	5000	N	Spokane, Wash.	P—6:00-mid.
WLAC	ae	5000	C	Nashville, Tenn.	C—7:00-mid.

## 1480 kilocycles 202.6 meters

CMBK	z	15	1485	Havana, Cuba.	E
KOMA	ak	5000	C	Oklahoma City, Okla.	C—6:30-mid.
WKBW	ae	5000	C	Buffalo, N. Y.	E—10:00-1:00

## 1490 kilocycles 201.2 meters

WCKY	ae	5000	BY	Covington, Ky.	E—7:00-mid.
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## 1500 kilocycles 199.9 meters

CRCS	z	100	F	Chicoutimi, Que.	E—6:30-11:30
KDB	ak	100	CT	Santa Barbara, Calif.	P—7:30-mid.
KGFI	ak	100	(.25)	Corpus Christi, Tex.	C—7:00-3:00; 6:00-10:00
KGFK	ak	100	.....	Moorhead, Minn.	C—8:00-9:00
KGKB	ak	100	.....	Tyler, Texas.	C—8:00-9:00; noon-2:00; 5:00-6:00; 7:30-9:00
KGKY	ck	100	.....	Scottsbluff, Neb.	M—9:00-1:30; 5:30-9:00
KNOW	ak	100	.....	Austin, Texas.	C—7:30-2:00; 4:00-10:00
KPJM	ak	100	.....	Prescott, Ariz.	M—7:00-8:00
KPO	aj	100	.....	Wenatchee, Wash.	P—7:00-10:00
KREG	ak	100	.....	Santa Ana, Calif.	P—9:00-11:00
KXO	al	100	.....	El Centro, Calif.	P—7:00-2:00; 4:00-9:00
WCNV	ak	100	i	Brooklyn, N. Y.	E—2:00-6:00
WFDV	ak	100	.....	Rome, Ga.	C—7:00-10:00; noon-3:00; 6:00-9:00
WHEF	z	100	P (.25)	Kosciusko, Miss.	C
WKBB	ae	100	.....	East Dubuque, Ill.	C—7:00-10:15; 11:45-1:30; 5:30-9:00
WKVB	z	100	.....	Richmond, Ind.	C
WKWB	ak	100	.....	Ludington, Mich.	E—9:00-9:00
WKEU	ak	100	.....	LaGrange, Ga.	C—10:00-noon; 3:00-6:00
WMBQ	ae	100	i	Brooklyn, N. Y.	E—9:00-11:00; 8:00-mid.
WMPC	ak	100	.....	Lapeer, Mich.	E—10:00-2:00; 3:30-6:00; 7:00-10:30
WNBF	ae	100	.....	Binghamton, N. Y.	E—7:30-10:00
WOPJ	ae	100	.....	Bristol, Tenn.	E—7:00-2:00; 3:00-8:00
WPN	ck	100	(.25)AZ	Philadelphia, Pa.	E—7:30-10:00
WRDW	ae	100	.....	Augusta, Ga.	E
WSYB	ae	100	.....	Rutland, Vt.	E—10:00-1:00; 5:00-9:00
WWRL	ak	100	i	Woodside, N. Y.	E—8-9; 11-2; 6-8

(Continued on page 91)

# INDEX BY LOCATIONS

Frequency in kilocycles in second column. Night power in watts in third column. Network affiliations in fourth column: C Columbia, E National Red, B National Blue, N National Red and Blue. F Canadian.

<b>ALABAMA</b>	<b>Fresno</b>	<b>CONNECTICUT</b>	<b>Twin Falls</b>
Anniston	KMJ 580 500 C	Bridgeport	KTFI 1240 1000
WAMC 1420	Glendale	WICC 600 250 C	<b>ILLINOIS</b>
Birmingham	KIEV 850 100	Hartford	Carthage
WAPI 1140 5000 N	Hollywood	WDR 1330 1000 C	WCAZ 1070 50
WBRC 930 500 C	KFWB 950 1000	WTRC 1060 5000 R	<b>Chicago</b>
WKBC 1310 100	KMTR 570 500	Storrs	KYW 1020 10000 N
Dothan	KNX 1050 25000	WCAZ 600 250	WAAF 920 500
WHET 1370 100	<b>Long Beach</b>	<b>DELAWARE</b>	WBBM 770 25000 C
Gadsden	KFOX 1250 1000	Wilmington	WCFL 970 1500 B
WJBY 1210 100	KGER 1360 1000	WDEL 1120 250	WCRW 1210 100
Huntsville	<b>Los Angeles</b>	WILM 1420 100	WEDC 1210 100
WBHS 1200 100	KECA 1430 1000 N	<b>DISTRICT OF COLUMBIA</b>	WENR 870 50000 N
Mobile	KFAC 1300 1000	Washington	WGES 1360 500
WODX 1410 500 C	KFI 640 50000 N	WISV 1450 10000 C	WGN 720 50000
Montgomery	KFSG 1120 500	WMAL 630 250 B	WJJD 1130 20000
WSFA 1410 500 C	KFVD 1000 250	WOL 1310 100	WLS 870 50000 N
Muscle Shoals	KGFJ 1200 100	WRC 950 500 R	WMAQ 670 5000 N
WNRA 1420 100	KHJ 900 1000 C	<b>FLORIDA</b>	WMBI 1080 5000
<b>ALASKA</b>	KRKD 1120 500	Clearwater	WSBC 1210 100
Anchorage	KTM 780 500	WFLA 620 1000 N	<b>Clevo</b>
KFOD 600 250	<b>Oakland</b>	Gainesville	WEHS 1420 100
Juneau	KLS 1440 250	WRUF 830 5000	WHFC 1420 100
KIFH 1310 100	KLX 880 1000	Jacksonville	WKBI 1420 100
Ketchikan	KROW 930 500	WJAX 900 1000 N	<b>Decatur</b>
KGBU 900 500	<b>Pasadena</b>	Miami	WJBL 1200 100
<b>ARIZONA</b>	KPPC 1210 50	WIOD 1300 1000 N	East Dubuque
Jerome	KFBK 1310 100 C	WQAM 560 1000 C	WKBB 1500 100
KCRJ 1310 100	<b>San Bernardino</b>	Orlando	Harrisburg
Lowell	KFXM 1210 100	WDBO 580 250 C	WEBQ 1210 100
KSUN 1200 100	<b>San Diego</b>	Pensacola	Joliet
Phoenix	KPSD 600 1000 N	WCOA 1340 500	WCLS 1310 100
KOY 1390 500	KGB 1330 1000 C	St. Petersburg	LaSalle
KTAR 620 500 N	<b>San Francisco</b>	WSUN 620 1000 N	WJBC 1200 100
<b>Prescott</b>	KFRC 610 1000 C	Tampa	Peoria
KPJM 1500 100	KRWI 930 500	WDAE 1220 1000 C	WMBD 1440 500 C
<b>Tucson</b>	KGGC 1420 100	WMBR 1370 100	<b>Quincy</b>
KGAR 1370 100	KGO 790 7500 N	<b>GEORGIA</b>	WTAD 1440 500
KVOA 1260 500	KJBS 1070 100	Americus	Rock Island
<b>Yuma</b>	KPO 680 50000 N	WENC 1420 100	KFLV 1410 500
KUMA 1420 100	KTAB 560 1000	Athens	Rock Island
<b>ARKANSAS</b>	KYA 1230 1000 N	WTFI 1450 500	WHBF 1210 100
Blytheville	<b>San Jose</b>	Atlanta	Springfield
KLCN 1290 100	KQW 1010 500	WJTL 1370 100	WCBS 1210 100
Fayetteville	<b>Santa Ana</b>	WSB 740 50000 N	WTAX 1210 100
KUOA 1260 1000	KREG 1500 100	Augusta	Tuscola
Fort Smith	KDB 1500 100 C	WRDW 1500 100	WDZ 1070 100
KFPW 1210 100	<b>Stockton</b>	Columbus	Urbana
<b>Hot Springs</b>	KGDM 1100 250	LaGrange	WILL 890 250
KTHS 1040 10000 N	KWG 1200 100 C	WRLB 1200 100	Zion
..... 1500 100	<b>COLORADO</b>	WKB 1500 100	WCB 1080 5000
<b>Jonesboro</b>	Alamosa	<b>MASSACHUSETTS</b>	<b>INDIANA</b>
KBTM 1200 100	KGIW 1420 100	WMAZ 1180 500	Anderson
<b>Little Rock</b>	<b>Colorado Springs</b>	Rome	WBHU 1210 100
KARK 890 250	KVOR 1270 1000 C	WDFV 1500 100	Elkhart
KGHI 1200 100	<b>Denver</b>	Savannah	WTRC 1310 50
KLRA 1390 1000 C	KFEL 920 500	WTOC 1260 500 C	Evansville
<b>Texarkana</b>	KEXF 920 500	Thomasville	WGBF 630 500
KCMC 1420 100	KLZ 830 12500 N	WQDX 1210 100	<b>Fort Wayne</b>
<b>CALIFORNIA</b>	KPOF 880 500	<b>HAWAII</b>	WGL 1370 100 C
Bakersfield	<b>Grand Junction</b>	Hilo	WOWO 1160 10000 C
KERN 1200 100 C	KFXJ 1200 100	KWVF 1210 100	Gary
Berkeley	<b>Greely</b>	Honolulu	WIND 560 1000 C
KRE 1370 100	KFKA 880 500	KGMB 1320 250 C	Hammond
<b>Beverly Hills</b>	Lamar	KGU 750 2500 N	WWAE 1200 100
KMPK 710 500	KIDW 1420 100	<b>IDAHO</b>	Indianapolis
<b>Burbank</b>	Pueblo	KIDO 1350 1000	WBFB 1230 1000 C
KELW 780 500	KGHF 1320 250	Idaho Falls	WKBF 1400 500 N
<b>El Centro</b>	Yuma	KID 1320 250	<b>Muncie</b>
KXO 1500 100	KGEK 1200 100	Nampa	WLBC 1310 100
<b>Eureka</b>	<b>San Francisco</b>	Pocatello	Richmond
KIEM 1210 100	KSEI 890 250	<b>San Francisco</b>	WKBV 1500 100
			South Bend
			WFAM 1200 100 C

# INDEX BY LOCATIONS

WSBT 1230 500 C	KWEA 1210 100	<b>MINNESOTA</b>	KFOR 1210 100
Terre Haute	KWKH 850 10000	Fergus Falls	Norfolk
WBOW 1310 100	<b>MAINE</b>	KGDE 1200 100	WJAG 1060 1000
West Lafayette	Augusta	Minneapolis	North Platte
WBAA 1400 500	WRDO 1370 100	WCCO 810 50000 C	KGNE 1430 500
<b>IOWA</b>	Bangor	WDGY 1180 1000	<b>Omaha</b>
Ames	WABI 1200 100	WLB 1250 1000	WAAW 660 500
WOI 640 5000	WLBZ 620 500 C	WRHM 1250 1000	WOW 590 1000 R
Boone	Portland	WCSH 940 1000 R	Scottsbluff
KFGQ 1310 100	WLEA 1340 250	WLEC 1340 250	KGKY 1500 100
Cartor Lake	Presque Isle	WAL 1250 1000	<b>York</b>
KICK 1420 100	WAGM 1420 100	St. Paul	KBZ 930 500
Cedar Rapids	<b>MARYLAND</b>	KSTP 1460 10000 N	<b>NEVADA</b>
KWCR 1420 100 B	Baltimore	<b>MISSISSIPPI</b>	Las Vegas
Council Bluffs	WBAL 1060 10000 B	Greenville	KGIX 1420 100
KOIL 1260 1000 B	WCAO 600 250 C	WKFJ 1210 100	Reno
Decorah	WCBM 1370 100	Hattiesburg	KOH 1380 500 C
KGCA 1270 100	WFBM 1270 500 R	WPF 1370 100	<b>NEW HAMPSHIRE</b>
KWLC 1270 100	Cumberland	Jackson	Manchester
Des Moines	WTBO 1420 100	WJDX 1270 1000 N	WFEA 1430 500 C
KSD 1000 50000 R	Hagerstown	Kosciusko	Portsmouth
WOC 1300 50000 R	WJEL 1210 100	WHEF 1500 100	WHEB 740 250
WHO	<b>MASSACHUSETTS</b>	Laurel	<b>NEW JERSEY</b>
Iowa City	Babson Park	WAML 1310 100	Asbury Park
WSUI 880 500	WBSO 920 500	Meridian	WCAP 1280 500 A
Marshalltown	Boston	WCOC 880 500	Atlantic City
KFJB 1200 100	WAAB 1410 500 C	Mississippi City	WPG 1100 5000 C
Ottumwa	WBZ 990 50000 B	Tupelo	WPM 1100 5000 C
WIAS 1310 100	WEEI 690 1000 R	WJEM 990 500	Camden
Shenandoah	WHDH 830 1000	Vicksburg	WCAM 1280 500
KFNE 890 500	WNAC 1230 1000 C	WQBC 1360 500	Jersey City
KMA 930 500	Chelsea	<b>MISSOURI</b>	WAAT 940 300
Sioux City	Fail River	Cape Girardeau	WHOM 1450 250
KSCJ 1330 1000 C	WSAR 1450 250	KFVS 1210 100	Newark
Waterloo	Lexington	Columbia	WGCP 1250 1000
WMT 600 500 C	WLEY 1370 100	KFRU 630 500	WNEW 1250 1000
<b>KANSAS</b>	New Bedford	WOS 630 500	WOR 710 5000
KFBI 1050 5000	WNBH 1310 100	Jefferson City	Red Bank
Coffeyville	Springfield	WMBH 1420 100	WJBI 1210 100
KGGE 1010 500	WBZA 990 1000 B	Kansas City	Trenton
Dodge City	WMAZ 1420 100 C	KMBC 950 1000 C	WTNJ 1280 500
KGNO 1340 250	Worcester	KWKC 1370 100	Zarephath
Kansas City	WORC 1280 500 C	WDAF 610 1000 R	WAWZ 1350 250
WLBZ 1420 100	WTAG 580 750 R	WHB 860 500	<b>NEW MEXICO</b>
Lawrence	<b>MICHIGAN</b>	WQO 1300 1000	Albuquerque
KFKU 1220 500	Battle Creek	St. Joseph	KGMM 1230 250
WREN 1220 1000 B	Bay City	KFEQ 680 2500	KOB 1180 10000
Manhattan	Calumet	<b>St. Louis</b>	Clovis
KSAC 580 500	WHDF 1370 100	KFUO 550 500	KICA 1370 100
Tepeka	Detroit	KMOX 1090 50000 C	Roswell
WIBW 580 1000 C	WJBK 1370 50	KSD 550 500 R	KGFL 1370 100
Wichita	WJRW 750 10000 B	KWK 1350 1000 B	<b>NEW YORK</b>
KFH 1300 1000 C	WMBZ 1420 100	WEW 760 1000	Albany
<b>KENTUCKY</b>	WWJ 920 1000 R	WIL 1200 100	WOKO 1430 500 C
Covington	WXYZ 1240 1000	Springfield	Auburn
WCKY 1490 5000 B	East Lansing	KGXB 1310 100	Binghamton
Louisville	WKAR 1040 1000	KTWO 560 500	WNBF 1500 100
WAVE 940 1000	Fillit	<b>MONTANA</b>	Brooklyn
WHAS 820 50000 C	WFDF 1310 100	Billings	WARD 1400 500
WLAP 1200 100	Grand Rapids	KGHL 950 1000 N	WBBC 1400 500
WPAD 1420 100	WASH 1270 500	Butte	WBRR 1300 1000
<b>LOUISIANA</b>	WOOD 1270 500	Great Falls	WCNW 1500 100
Baton Rouge	Ironwood	KFB 1280 1000	WLTH 1400 500
WJBO 1420 100	WJMS 1420 100	Kallispell	WMBQ 1500 100
Monroe	Jackson	KGEE 1310 100	WVFW 1400 500
KMLB 1200 100	WIBM 1370 100	Missoula	Buffalo
New Orleans	Kalamazoo	KGVO 1200 100	WBEN 900 1000 R
WBBX 1200 100	WKZO 590 1000	Wolf Point	WEBR 1310 100
WDSU 1250 1000 C	Lapeer	KGCX 1310 100	WGR 550 1000 C
WJBW 1200 100	WMPC 1500 100	<b>NEBRASKA</b>	WKBW 1480 5000 C
WSMB 1320 500 N	Ludington	Clay Center	WSVS 1370 50
WWL 850 10000	WKBZ 1500 100	KMMJ 740 1000	Canton
Shreveport	Marquette	Kearney	WCAD 1220 500
KRMD 1310 100	WBOE 1310 100	KGFW 1310 100	Chester
KTBS 1450 1000 N	Royal Oak	Lincoln	WGNY 1210 100
	WEXL 1310 50	KFAB 770 5000 C	Elmira
			WESG 1040 1000

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Freeport	Canton	Grove City	Sioux Falls
WGBB 1210 100	WHBC 1200 100	WSAJ 1310 100	KSOO 1110 1000
Hudson Falls	Cincinnati	Harrisburg	Vermillion
WGLC 1370 100 C	WFBB 1200 100	WBAK 1430 1000	KUSD 890 500
Jamestown	WKRC 550 1000 C	WHP 1430 500 C	Watertown
WOCL 1210 50	WLW 700 50000 N	WKBO 1200 100	KGCR 1210 100
New York	WSAI 1330 1000 R	Hazelton	Yankton
WABC 860 50000 C	Cleveland	WAZL 1420 100	WNAX 570 1000 C
WBNX 1350 250	WCAR 1450 500 B	Johnstown	<b>TENNESSEE</b>
WBOQ 860 50000 R	WHK 1390 1000 C	WJAC 1310 100	Bristol
WEAF 660 50000 R	WJAY 610 500	Lancaster	WOPI 1500 100
WEVD 1300 500	WTAM 1070 50000 R	WGAL 1310 100	Chattanooga
WFAB 1300 1000	Columbus	WKJC 1200 100	WDDO 1280 1000 C
WHN 1010 250	WAIU 640 500	Philadelphia	Jackson
WINS 1180 500	WCAH 1430 500 C	WCAU 1170 50000 C	WTJS 1310 100
WJZ 760 50000 B	WOSU 570 750	WDAS 1370 100	Knoxville
WLWL 1100 5000	WSEN 1210 100	WFI 860 500 R	WNOX 560 1000 C
WMCA 570 500	Dayton	WHAT 1310 100	WROL 1310 100
WNYC 810 500	WSMK 1380 200	WIP 610 500 C	Memphis
WOV 1130 1000	Mount Orab	WLIT 560 500 R	WHBQ 1370 100
WPA 1010 250	WHBD 1370 100	WPN 1500 100	WMC 780 500 N
WQAO 1010 250	Toledo	WRAX 1020 250	WNR 1430 500
WRNY 1010 250	WSPD 1340 1000 C	WTEL 1310 100	WREC 600 500 C
Rochester	Youngstown	Pittsburgh	Nashville
WHAM 1150 50000 B	WKBN 570 500 C	KDKA 980 50000 B	WLAC 1470 5000 C
WHCC 1430 500 C	Zanesville	KOK 1380 500 C	WSM 650 50000 N
Saranac Lake	WALR 1210 100	WCAB 1220 1000 R	Springfield
WNBZ 1290 50	<b>OKLAHOMA</b>	WJAS 1290 1000 C	WSIX 1210 100
Schenectady	Eik City	WWSW 1500 100	<b>TEXAS</b>
WGY 790 50000 R	KASA 1210 100	Reading	Amarillo
Syracuse	Enid	WBEU 830 1000	KGRS 1410 1000
WFB 1360 1000 C	KCRC 1370 100	WIAW 1310 100	WDAG 1410 1000
WYSR 570 250 B	Norman	Seranton	Austin
Troy	WNAJ 1010 500	WGBI 880 250	KNOW 1500 100
WHAZ 1300 500	Oklahoma City	WQAN 880 250	Beaumont
Upper Lake	KFXR 1310 100	Silverhaven	KFDM 560 500
WHDL 1420 100	KGFG 1370 100	WNB 1200 100	Brownsville
Utica	KOMA 1480 5000 C	Sunbury	KWWG 1260 500
WIBX 1200 100	WKY 900 1000 N	Wilkes-Barre	College Station
White Plains	Ponca City	WBAX 1210 100	WTAW 1120 500
WFS 1210 100	WBBZ 1200 100	WBRE 1310 100	Corpus Christi
Woodside	Shawnee	Willamport	KGFI 1500 100
WWRL 1500 100	KGFF 1420 100	WRAC 1370 100	Dallas
<b>NORTH CAROLINA</b>	Tulsa	York	KRLD 1040 10000 C
Asheville	KTUL 1400 250	WORK 1000 1000	WFAA 800 50000 N
WVNC 570 1000 N	KVOO 1140 25000 N	<b>PHILIPPINES</b>	WRR 1280 500 C
Charlotte	<b>OREGON</b>	Manila	Dublin
WBT 1080 50000 C	Corvallis	KZEG 618.5 1000	KFPL 1310 100
WSOC 1210 100 N	KOAC 550 1000	KZRM 618.5 50000	El Paso
Greensboro	Eugene	<b>PORTO RICO</b>	KTSM 1310 100
WBIG 1440 500 C	KORE 1420 100	San Juan	WDAH 1310 100
Greenville	Klamath Falls	WKAQ 1240 1000	Fort Worth
WEED 1420 100	KFJJ 1210 100	..... 1290 500	KFJZ 1370 100
Raleigh	Marshfield	<b>RHODE ISLAND</b>	KTAT 1240 1000 C
WPTF 680 5000 N	KOOS 1370 100	Providence	WBAP 800 50000 N
Wilmington	KMED 1310 100	WEAN 780 500 C	KLUF 1370 100
WRAM 1370 100	KALE 1300 500 C	WJAR 890 500 R	Greenville
Winston-Salem	KBPS 1420 100	WPRO 1210 100	KFPM 1310 15
WSJS 1310 100 C	KEX 1180 5000 N	<b>SOUTH CAROLINA</b>	Harrington
<b>NORTH DAKOTA</b>	KFJR 1300 500	Charleston	KRGV 1260 500
Bismarck	KGW 620 1000 N	WCSC 1360 500	Houston
KFYR 550 1000 N	KOIN 940 1000 C	Columbia	KPRC 920 1000 N
Devils Lake	KWJJ 1060 500	Greenville	KTRH 1120 1000 C
KDLR 1210 100	KXL 1420 100	WIS 1010 500 N	KXYZ 1440 250
Fargo	<b>PENNSYLVANIA</b>	WFCB 1200 100	Lubbock
WDAY 940 1000 N	Allentown	Spartanburg	KFYO 1310 100
Grand Forks	WCSA 1440 250	WSPA 1420 100	San Angelo
KFJM 1370 100	WSAN 1440 250	<b>SOUTH DAKOTA</b>	San Antonio
Mandan	Altoona	Brookings	KABC 1420 100
KGCU 1240 250	WFBG 1310 100	KFDY 550 500	KMAC 1370 100
Minot	Carbondale	Huron	KONO 1370 100
KLPM 1240 250	WNBW 1200 10	Pierre	KTSA 1290 1000 C
<b>OHIO</b>	Erie	KGDF 1340 250	WAOI 1190 50000 N
Akron	WLBW 1260 500 C	WLBW 1260 500 C	Tyler
WADC 1320 1000 C	Glenview	Rapid City	KGKB 1500 100
WJW 1210 100	WIBG 970 100	WCAT 1200 100	Waco
			WACO 1420 100 C

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**Wichita Falls**  
KGKO 570 250

**UTAH**  
**Ogden**  
KLO 1400 500 C  
**Salt Lake City**  
KDYL 1290 1000 N  
KSL 1130 50000 C

**VERMONT**  
**Burlington**  
WCAX 1200 100  
**Rutland**  
WSYB 1500 100  
**St. Albans**  
WQDM 1370 100  
**Springfield**  
WNBX 1260 250  
**Waterbury**  
WDEV 550 500

**VIRGINIA**  
**Arlington**  
NAA 690 1000  
**Charlottesville**  
WEHC 1350 500  
**Danville**  
WBTM 1370 100  
**Lynchburg**  
WLVA 1370 100  
**Newport News**  
WGH 1310 100  
**Norfolk**  
WTAR 780 500 C  
**Petersburg**  
WPHR 1200 100  
**Richmond**  
WBBL 1210 100  
WMBG 1210 100 C  
WRVA 1110 5000 N  
**Roanoke**  
WDBJ 930 250 C  
WRBX 1410 250

**WASHINGTON**  
**Aberdeen**  
KXRO 1310 100  
**Bellingham**  
KVOS 1200 100  
**Everett**  
KFBL 1370 50  
**Olympia**  
KGY 1210 100  
**Pullman**  
KWSC 1220 1000  
**Seattle**  
KJR 970 5000 N  
KOL 1270 1000 C  
KOMO 920 1000 N  
KPCB 650 100  
KRSC 1120 100  
KTVL 1220 1000  
KWL 1370 100  
KXA 760 250  
**Spokane**  
KFIO 1120 100  
KFPY 1340 1000 C  
KGA 1470 5000 N  
KHQ 590 1000 N  
**Tacoma**  
KMO 1330 250  
KVI 570 500 C  
**Walla Walla**  
KUJ 1370 100  
**Wenatchee**  
KPK 1500 100  
**Yakima**  
KIT 1310 100

**WEST VIRGINIA**  
**Bluefield**  
WHIS 1410 250  
**Charleston**  
WOB 580 750  
**Fairmont**  
WMMN 890 250  
**Huntington**  
WSAZ 1190 1000  
**Wheeling**  
WWVA 1160 5000 C

**WISCONSIN**  
**Eau Claire**  
WTAQ 1330 1000 C  
**Fond du Lac**  
KFIZ 1420 100  
**Green Bay**  
WBHY 1200 100  
**Janesville**  
WCLQ 1200 100  
**LaCrosse**  
WKBH 1380 1000 C  
**Madison**  
WHA 940 1000  
WIBA 1280 500 N  
**Manitowoc**  
WOMT 1210 100  
**Milwaukee**  
WHAD 1120 250 C  
WISN 1120 250 C  
WTMJ 620 1000 N  
**Poyntette**  
WIBU 1210 100  
**Racine**  
WRJN 1370 100  
**Sheboygan**  
WHBL 1410 500  
**Stevens Point**  
WLBL 900 2500  
**Superior**  
WEBE 1290 1000 N  
**WYOMING**  
**Casper**  
KDFN 1440 500

**CANADA**  
**ALBERTA**  
**Calgary**  
CFAC 930 100  
CFCN 1030 10000 F  
CJCL 690 100  
**Edmonton**  
CFPT 1120 100  
CJCA 730 1000 F  
CKUA 580 500  
**Lehridge**  
CJOC 840 100 F  
**BRT. COLUMBIA**  
**Chilliwack**  
CHWK 780 100 F  
**Kamloops**  
CFJC 1310 100 F  
**Kelowna**  
CKOV 1210 50 F  
**Trail**  
CJAT 1200 50  
**Vancouver**  
CJOR 600 500  
CKCD 1010 100  
CKFC 1410 50  
CKMO 1410 100  
CKWX 1010 100  
CRCV 1100 1000 F  
**Victoria**  
CFCT 1450 50  
**MANITOBA**  
**Brandon**  
CKX 1450 500 F

**Middlechurch**  
CJRC 1390 100  
**Winnipeg**  
CKY 910 5000 F

**NEW BRUNSWICK**  
**Fredericton**  
CFNB 1030 500 F  
**St. John**  
CFBO 1210 100 F  
CHPR 1370 100

**NOVA SCOTIA**  
**Glace Bay**  
VAS 685 2000  
**Halifax**  
CHNS 1050 500 F  
**Sydney**  
CJCB 880 50 F  
**Wolfville**  
CKIC 1010 50  
**Yarmouth**  
CJLS 1310 100

**ONTARIO**  
**Brantford**  
CKPC 930 100 F  
10-BQ 1200 15  
**Chatham**  
CFCO 600 50 F  
**Cobalt**  
CKMC 1210 50  
**Fort William**  
CKPR 780 50 F  
**Hamilton**  
CHML 1010 50  
CKOC 1120 500 F  
**Kingston**  
CFRC 1510 100  
**Kirkland Lake**  
CJKL 1310 100  
**Kitchener**  
CKCR 1510 100  
**London**  
CFPL 730 100 F  
**North Bay**  
CFCH 930 100 F  
**Ottawa**  
CKCO 1010 100  
CRCO 880 1000 F  
**Prescott**  
CFLC 930 100  
**St. Catharines**  
CKTB 1200 100  
**Stratford**  
10-AK 1200 15  
**Sudbury**  
CJCS 780 500  
**Timmins**  
CKGB 1420 100  
**Toronto**  
CFRB 690 10000 C  
CKCL 580 100  
CRCT 960 5000 N  
CKNC 1030 100 F  
**Windsor**  
CKLW 840 5000 C  
**Wingham**  
10-BP 1200 15

**PRINCE EDWARD ISLAND**  
**Charlottetown**  
CFY 630 500 F  
CHCK 1410 50  
**Summerside**  
CHGS 1120 50 F

**QUEBEC**  
**Chicoutimi**  
CRCS 1500 100 F  
**Hull**  
CKCH 1210 100 F

**Montmagny**  
VE9EK 1195 10

**Quebec**  
CHNC 1210 100 F  
CHRC 930 100 F  
CKCV 1310 50

**SASKATCHEWAN**  
**Canora**  
10-BU 1200 15  
**Fleming**  
CJRW 540 500 F  
**Moose Jaw**  
CHAB 1200 100  
CJRM 540 1000 F  
**Prince Albert**  
CKBI 1210 100  
**Regina**  
CHWC 1010 500 F  
CKCK 1010 500 F  
**Saskatoon**  
CFQC 1230 500 F  
**Yorkton**  
CJGX 630 500 F

**NEWFOUNDLAND**  
**St. John's**  
VOAC 800 40  
VOAS 810 100  
VOGY 950 75  
VOKW 1085 30  
VONF 1195 400  
VOWR 900 500

**MIQUELON**  
**St. Pierre**  
FQN 572 250

**CENTRAL AMERICA**  
**COSTA RICA**  
**Cartago**  
TIFS 1441 7.5  
TIGA 1014 30  
**San Jose**  
TICR 912 75  
TIEA 833 7.5  
TIEP 1450 7.5  
TIFB 714 30  
TIGP 800 75  
TIRCA 1100 500  
TISO 550 250  
TITV 999 7.5  
TIVL 869 30  
TIXA 614 7.5

**GUATEMALA**  
**Guatemala City**  
TGW 1350 500  
TGX 1380 75

**EL SALVADOR**  
**San Salvador**  
RUS 664 500

**MEXICO**  
**AGUASCALIENTES**  
**Aguascalientes**  
XFC 805 350  
**BAJA CALIFORNIA**  
**Mexicali**  
XEAQ 560 100  
**Tijuana**  
XEAE 980 800  
XEOK 757 5000

**CHIHUAHUA**  
**Chihuahua**  
XEFI 1260 250  
**Juarez**  
XEFV 1400 100  
XEJ 1015 500

**COAHUILA**  
**Piedras Negras**  
XEPN 585 75000  
**Saltillo**  
XEL 1000 40  
**Torreón**  
XETB 1380 125  
**Villa Acuna**  
XER- 735 150000  
XEF

**D. F.**  
**Mexico City**  
XEA 1090 100  
XEB 1030 10000  
XEFA 1250 500  
XEFB 1085 500  
XEFZ 1370 100  
XEK 990 100  
XEN 711 1000  
XEO 940 5000  
XEP 780 500  
XETW 830 500  
XETZ 1210 50  
XEWV 1100 250  
XEW 010 5000  
XEYZ 760 10000  
XFG 638 2000  
XFO 940 5000  
XFX 840 500

**Toluca**  
XEC 1000 50

**HIDALGO**  
**Pachuca**  
XETU 890 100

**JALISCO**  
**Guadalajara**  
XEA 1000 250  
XED 1155 500

**MICHOACAN**  
**Morelia**  
XEI 1310 250

**NUEVO LEON**  
**Monterrey**  
XEFB 1315 100  
XEFJ 1000 100  
XEH 1132 250  
XET 690 500  
XEX 630 50

**PUEBLA**  
**Puebla**  
XETH 860 100

**QUERETARO**  
**Queretaro**  
XEFS 1000 40

**SAN LUIS POTOSI**  
**San Luis Potosi**  
XEAC 1295 100

**SONORA**  
**Nogales**  
XEA 990 750  
**TAMAULIPAS**  
**Nuevo Laredo**  
XEAB 1450 7.5  
XEFE 985 100  
XENT 1115 150000

**Reynosa**  
XEA 965 10000  
**Tampico**  
XEFW 1280 70  
XES 1020 250

**VERACRUZ**  
**Jalapa**  
XFB 1290 1000  
**Veracruz**  
XEU 1010 100

**YUCATAN**  
**Merida**  
XEFC 1050 100  
XEY 546.8 10  
XEZ 630 500

**WEST INDIES**  
**CUBA**  
**Calbarien**  
CMHD 945.5 500  
**Camaguey**  
CMJC 1382 150  
CMJE 1170 50  
CMJF 910 200

CMJG 1050 50  
CMJK 790 500  
CMJL 960 50  
CMJN 1240 50

**Cardenas**  
CMGE 1375 30

**Ciego de Avila**  
CMJH 1150 50  
CMJI 1335 45  
CMJO 1010 50

**Cienfuegos**  
CMHJ 1125 60  
CMHL 1290 20  
CMHW 1200 100

**Colon**  
CMGA 834 100

**Cruces**  
CMHK 1225 50

**Guantanamo**  
CMKJ 1300 20

**Havana**  
CMAF 680 1000  
CMBC 1270 150  
CMBD 965 250  
CMBG 1052 225  
CMBJ 1140 500  
CMBK 1485 15  
CMBL 1445 200  
CMBN 1185 150  
CMBS 765 200  
CMBW 1140 600  
CMBY 1230 250  
CMCZ 1005 150  
CMC 835 500  
CMCA 1230 150  
CMCB 1052 150  
CMCD 915 500  
CMCF 873 250  
CMCH 1410 50  
CMCJ 1180 500  
CMCN 1410 15  
CMCN 1375 250  
CMCP 1270 150  
CMCQ 775 1000  
CMCR 1375 150  
CMCU 1100 500

CMCW 965 150  
CMCY 1320 500  
CMDD 588 150  
CMDE 925 150  
CMK 730 5000  
CMQ 630 500  
CMW 595 1400  
CMX 875 1000

**Matanzas**  
CMGB 1205 30  
CMGC 820 30  
CMGF 971.5 100  
CMGH 1040 15

**Moron**  
CMJP 1360 75

**Pinar del Rio**  
CMAB 1249 20

**Santa Clara**  
CMHI 1037 250

**Santiago**  
CMKC 1034 150

**DOMINICAN REPUBLIC**  
**San Pedro de Macoris**  
HHH 1395 15  
**Santo Domingo**  
HJ 1195 15  
HIX 580 1500  
HIZ 1300 10

**HAITI**  
**Port-au-Prince**  
HHK 920 1000

**SOUTH AMERICA**  
**ARGENTINA**  
**Buenos Aires**  
LR5 830 20000

**COLOMBIA**  
**Bogota**  
HJN 681 500

**VENEZUELA**  
**Caracas**  
YV1BC 960 5000  
YV2BC 882 100  
YV3BC 1200 1000

The harmonious Morin Sisters, left to right, Marge, Pauline and Evelyn, heard on the Sealed Air Sideshow over an NBC (Blue) network on Mondays at 8:00 p. m. EST. These sisters hail from Indiana, but got their first real start over WLW. Paul White man heard them there and advised them to try their fortunes at the Chicago NBC studios, where they immediately clicked.





# INDEX BY CALL LETTERS

CFAC 930 100 Calgary, Alta. Calgary Herald.	CJOR 600 500 Vancouver, B. C. G. O. Chandler.
CFBO 1210 100 St. John, N. B. C. A. Munro, Ltd.	CJRC 1390 100 Middlechurch, Man. James Richardson & Sons.
CFCF 600 500 Montreal, Que. Canadian Marconi Co.	CJRM 540 1000 Moose Jaw, Sask. James Richardson & Sons, Ltd.
CFCH 930 100 North Bay, Ont. Northern Broadcasting Co., Ltd.	CJRW 540 500 Fleming, Sask. James Richardson & Sons, Ltd.
CFCH 1030 10000 Calgary, Alta. Voice of the Prairies, Ltd.	CKAC 730 5000 Montreal, Que. LaPresse Publishing Co., Ltd.
CFGO 000 50 Chatham, Ont. John Beardsall.	CKBI 1210 100 Prince Albert, Sask. Prince Albert Radio Club.
CFGT 1450 50 Victoria, B. C. Victoria Broadcasting Assn.	CKGD 1010 100 Vancouver, B. C. Vancouver Daily Province.
CFGY 630 500 Charlottetown, P. E. I. Island Radio Broadcasting Co., Ltd.	CKGH 1210 100 Hull, Que. Dr. J. L. Chabot.
CFJC 1310 100 Kamloops, B. C. Review Publishing Co., Ltd.	CKCK 1010 500 Regina, Sask. Leader-Post, Ltd.
CFLC 630 100 Prescott, Ont. Radio Assn. of Prescott.	SKGL 500 100 Toronto, Ont. Dominion Battery Co., Ltd.
CFNB 1030 500 Fredericton, N. B. James S. Nell & Sons, Ltd.	CKGO 1010 100 Ottawa, Ont. Dr. G. M. Geldert.
CFPL 730 100 London, Ont. Free Press & Printing Co., Ltd.	CKGR 1510 100 Kitchener, Ont. William C. Mitchell and G. Liddle.
CFQC 1230 500 Saskatoon, Sask. Electric Shop, Ltd.	CKGV 1510 50 Quebec, Que. Vandry, Inc.
CFRB 600 10000 Toronto, Ont. Canadian Radio Corp., Ltd.	CKFC 1410 50 Vancouver, B. C. Radio Service Engineers, Ltd.
CFRC 1510 100 Kingston, Ont. Queens University.	CKGB 1420 100 Timmins, Ont. R. H. Thompson.
CFTF 1120 100 Edmonton, Alta. Taylor & Pearson, Ltd.	CKIC 1010 50 Wolfville, N. S. Acadia University.
CHAB 1200 100 Moose Jaw, Sask. Moose Jaw Radio Assn.	CKLW 840 5000 Windsor, Ont. Western Ontario Broadcasting Co., Ltd.
CHCK 1310 50 Charlottetown, P. E. I. J. A. Gesner.	CKMC 1210 50 Cobalt, Ont. R. L. MacAdam.
CHGS 1120 50 Summerside, P. E. I. R. T. Holman, Ltd.	CKMO 1410 100 Vancouver, B. C. Sprott-Shaw Radio Co.
CHLP 1120 100 Montreal, Que. La Patrie Publishing Co., Ltd.	CKNC 1030 100 Toronto, Ont. Canadian National Carbon Co., Ltd.
CHML 1010 50 Hamilton, Ont. Maple Leaf Radio Co., Ltd.	CKOC 1120 500 Hamilton, Ont. Westworth Radio Broadcasting Co., Ltd.
CHNC 1210 100 New Carlisle, Que. Dr. Charles Houde.	CKOV 1210 50 Kellewna, B. C. Okanagan Broadcasters, Ltd., Box 243.
CHNS 1050 500 Halifax, N. S. Maritime Broadcasting Co., Ltd.	CKPC 930 100 Brantford, Ont. Cyrus Dolph.
CHPR 1370 100 St. John, N. B. H. P. Robinson.	CKPR 780 50 Fort William, Ont. Dougall Motor Co., Ltd.
CHRC 930 100 Quebec, Que. CHRC, Ltd.	CKTB 1200 100 St. Catharines, Ont. E. T. Sandell.
CHWC 1010 500 Regina, Sask. R. H. Williams & Sons, Ltd.	CKUA 530 500 Edmonton, Alta. University of Alberta.
CHWK 780 100 Chilliwack, B. C. Chilliwack Broadcasting Co., Ltd.	CKWX 1010 100 Vancouver, B. C. Western Broadcasting Co., Ltd.
CJAT 1200 50 Trail, B. C. Trail Amateur Radio Assn.	CKX 1450 500 Brandon, Man. Manitoba Telephone System.
CJCA 730 1000 Edmonton, Alta. Edmonton Journal, Ltd.	CKY 910 500 Winnipeg, Man. Manitoba Telephone System.
CJCB 830 50 Sydney, N. S. Nathanson's Radio Headquarters.	CMAB 1240 20 Pinar del Rio, Cuba. Jose Silveira, Marti No. 101.
CJCC 630 100 Calgary, Alta. Albertan Publishing Co., Ltd.	CMAC 630 1000 Havana, Cuba. International Broadcasting Co., Miramar.
CJCS 780 500 Sudbury, Ont. George McLeod Coates.	CMBC 1270 150 Havana, Cuba. Domingo Fernandez, Maximo Gomes No. 139.
CJGX 930 500 Yorkton, Sask. Winnipeg Grain Exchange.	CMBD 935 250 Havana, Cuba. Luis Perez Garcia, Enamorados y Flores.
CKL 1310 100 Kirkland Lake, Ont. O. J. Thorpe & Branchaud.	CMBG 1062 225 Havana, Cuba. John L. Stowers, Hospital No. 100.
CJLS 1310 100 Yarmouth, N. S. Laurie L. Smith.	CMBJ 1140 500 Havana, Cuba. Emilio Perez, Consulado y Virtudes.
CJOC 640 100 Lethbridge, Alta. H. R. Carson, Ltd.	CMBK 1485 15 Havana, Cuba. Alberto Alveres, Paula y Oficio.

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CMBL 1445 200 Havana, Cuba. Julio C. Hidalgo, Vedado.	CMJE 1170 50 Camaguey, Cuba. Manuel Fernandez, Plaza de Maceo.
CMBN 1105 150 Havana, Cuba. G. de Sequeira, Agrimonte No. 32.	CMJF 910 200 Camaguey, Cuba. John L. Stowers, Hotel Plaza.
CMBB 785 200 Havana, Cuba. Enrique Artalejo, Calzada y H. St.	CMJG 1050 50 Camaguey, Cuba. Jose Antonio Lefran, Martires 133.
CMBW 1140 600 Havana, Cuba. Alvares, Morla y Cia, Obrapia No. 13.	CMJH 1150 50 Ciego de Avila, Cuba. Luis Marauri Mendosa.
CMBY 1230 250 Havana, Cuba. Callejas-Estefani, Principe No. 33.	CMJI 1335 45 Ciego de Avila, Cuba. Gilberto Gessa Lopez, Independencia 95.
CMBZ 1005 150 Havana, Cuba. Manuel y G. Salas, San Rafael No. 14.	CMJK 700 500 Camaguey, Cuba. Compania Cubana Nacional de Radio S. A.
CMC 835 500 Havana, Cuba. Radio Corp. of Cuba.	CMJL 900 50 Camaguey, Cuba. Enrique Artalejo, Cuba No. 27.
CMCA 1230 150 Havana, Cuba. Manuel Cruz, Ave. de Italia No. 102.	CMJN 1240 50 Camaguey, Cuba. Ernesto de Ugarriza, Martires 11.
CMCB 1052 150 Havana, Cuba. Metropolitan-Radio de Cuba.	CMJO 1010 50 Ciego de Avila, Cuba. Jose M. Roy, C. Central & Maceo.
CMCD 815 500 Havana, Cuba. Angel Bortemati.	CMJP 1350 75 Meron, Cuba. Cesar Canall, Callejas No. 28.
CMCF 873 250 Havana, Cuba. Raul Karmann.	CMK 730 5000 Havana, Cuba. National Broadcasting Co. of Cuba.
CMCH 1410 50 Havana, Cuba. Wifredo y Humberto Fontanella Sanchez.	CMKC 1034 150 Santiago, Cuba. Pinol Batlle y Co.
CMCJ 1130 500 Havana, Cuba. Rafael Rodriguez, Esteves No. 4.	CMKJ 1300 20 Guantanamo, Cuba. Luis Morlote, East Giro 11.
CMCM 1410 15 Havana, Cuba. Aurelio Balino, Belas Coain No. 639.	CMQ 930 500 Havana, Cuba. Jose Fernandez, 25 Numero 445.
CMCN 1375 250 Havana, Cuba. Antonio Ghard, Reina y Ave. Buen Retiro.	CMW 595 1400 Havana, Cuba. Troncoso y Gil, Paseo de Marti 103.
CMCP 1270 150 Havana, Cuba. Jose A. Yanis.	CMX 875 1000 Havana, Cuba. Casa "Lavin," Ave. de la Republica 99A.
CMCQ 775 1000 Havana, Cuba. Andres Martinez, Vista Alegre No. 80.	CMY 910 5000 Montreal, Que. Canadian Radio Broadcasting Commission.
CMCR 1375 150 Havana, Cuba. Aurelio Hernandez.	CMZ 880 1000 Ottawa, Ont. Canadian Radio Broadcasting Commission.
CMCU 1100 500 Havana, Cuba. Jorge Garcia Serra.	CMCS 1500 100 Chicoutimi, Que. Canadian Marconi Co., Ltd.
CMCW 905 150 Havana, Cuba. Vilarino y Cervantes.	CMCT 900 5000 Toronto, Ont. Canadian Radio Broadcasting Commission.
CMCY 1325 500 Havana, Cuba. Manuel D. Autran, Ave. de la Pdt. e. 215.	CMCV 1100 1000 Vancouver, B. C. Canadian Radio Broadcasting Commission.
CMDD 535 150 Havana, Cuba. G. de Sequeira.	FQN 572 250 St. Pierre, Mig.
CMDE 825 150 Havana, Cuba. Radio Aerial Ad.	HHK 020 1000 Port-au-Prince, Haiti. Haitian Government.
CMGA 834 100 Colon, Cuba. L. Valdes Figueroa, Marti No. 10.	HHH 1385 15 San Pedro de M., D. R. Domingo Dominguez.
CMGB 1295 30 Matanzas, Cuba. Jose Anorga, Magdalena No. 1.	HJJ 1105 15 Santo Domingo, D. R. Tuto Baes, Hostes 34.
CMGC 820 30 Matanzas, Cuba. Oscar S. Mechoso, Independencia No. 58.	HIX 580 1500 Santo Domingo, D. R. J. R. Saladin, Director General.
CMGE 1375 30 Cardenas, Cuba. Genaro Betater, Céspedes No. 180.	HIZ 1300 10 Santo Domingo, D. R. Abbes and Garcia.
CMGF 971.5 100 Matanzas, Cuba. Bernabe R. de la Torre.	HJN 881 500 Bogota, Colombia. Government of Colombia, National Library.
CMGH 1040 15 Matanzas, Cuba. Octavio y Julio Alvares.	KABC 1420 100 San Antonio, Texas. Alamo Broadcasting Co., Inc.
CMHD 945.5 500 Calbarien, Cuba. Manuel Alvares, M. Escobar 17.	KALE 1300 500 Portland, Ore. Kale, Inc., New Heathman Hotel.
CMHI 1037 250 Santa Clara, Cuba. Lavia y Pas.	KARK 630 250 Little Rock, Ark. Arkansas Radio & Equipment Co.
CMHJ 1125 50 Cienfuegos, Cuba. Victorino Lopez Hontanon.	KASA 1210 100 Elk City, Okla. E. M. Woody, Casa Grande Hotel.
CMHK 1225 50 Cienfuegos, Cuba. Virgilio Villanueva Fernandez.	KBPS 1420 100 Portland, Ore. Benson Polytechnic School.
CMHL 1200 20 Cienfuegos, Cuba. Oscar Zayas, San Carlos 143.	KBTM 1200 100 Jonesboro, Ark. Jay P. Beard.
CMHW 1200 100 Cienfuegos, Cuba. San Carlos No. 106.	KCMC 1420 100 Texarkana, Ark. M. P. Mima, Box 865.
CMJO 1332 150 Camaguey, Cuba. Feliciano Isaac, Cameros y G. Gomes.	KCRC 1370 100 Enid, Okla. Enid Radiophone Co.

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**KCRJ** 1310 100 Jerome, Ariz.  
Chas. C. Robinson, Drawer D.

**KDB** 1500 100 Santa Barbara, Calif.  
Santa Barbara Broadcasters, Ltd.

**KDFN** 1440 500 Casper, Wyo.  
Donald Lewis Hathaway.

**KDKA** 990 5000 Pittsburgh, Pa.  
Westinghouse Electric & Mfg. Co.

**KDLR** 1210 100 Devils Lake, N. D.  
KDLR, Inc., 1025 3rd Street.

**KDYL** 1200 1000 Salt Lake City, Utah.  
Intermountain Broadcasting Corp.

**KECA** 1430 1000 Los Angeles, Calif.  
Earle C. Anthony, Inc.

**KELW** 780 500 Burbank, Calif.  
Magnolia Park, Ltd., 3702 Magnolia

**KERN** 1200 100 Bakersfield, Calif.  
Bee Bakersfield Broadcasting Co.

**KEX** 1190 5000 Portland, Ore.  
National Broadcasting Co.

**KFAB** 770 5000 Lincoln, Neb.  
KFAB Broadcasting Co.

**KFAC** 1300 1000 Los Angeles, Calif.  
E. L. Cord, 645 So. Mariposa.

**KFBB** 1280 1000 Great Falls, Mont.  
Buttrey Broadcast, Inc.

**KFBI** 1050 5000 Abilene, Kans.  
Farmers & Bankers Life Ins. Co.

**KFBK** 1310 100 Sacramento, Calif.  
James McClatchy Publishing Co.

**KFBL** 1370 50 Everett, Wash.  
Leese Bros., 2814 Rucker Ave.

**KFDM** 580 500 Beaumont, Texas.  
Sabine Broadcasting Co.

**KFDY** 550 500 Brookings, S. D.  
South Dakota State College.

**KFEL** 920 500 Denver, Colo.  
Eugene P. O'Fallon, Inc.

**KFEQ** 580 2500 St. Joseph, Mo.  
Soroggin & Co. Bank

**KFGQ** 1310 100 Boone, Iowa.  
Boone Biblical College.

**KFH** 1300 1000 Wichita, Kans.  
Radio Station KFH Co.

**KFI** 840 50000 Los Angeles, Calif.  
Earle C. Anthony, Inc.

**KFIO** 1120 100 Spokane, Wash.  
Spokane Broadcasting Corp.

**KFIZ** 1420 100 Fond du Lac, Wis.  
Reporter Printing Co.

**KFJB** 1200 100 Marshalltown, Iowa.  
Marshall Electric Co.

**KFJI** 1210 100 Klamath Falls, Ora.  
KFJI Broadcasters, Inc., Willard Hotel.

**KFJM** 1370 100 Grand Forks, N. D.  
University of North Dakota.

**KFJR** 1300 500 Portland, Ore.  
Ashley C. Dixon-KFJR, Inc.

**KFJZ** 1370 100 Fort Worth, Texas.  
Fort Worth Broadcasters, Inc.

**KFA** 880 500 Greeley, Colo.  
Mid-Western Radio Corp.

**KFKU** 1220 500 Lawrence, Kans.  
University of Kansas.

**KFLV** 1410 500 Rockford, Ill.  
Rockford Broadcasters, Inc.

**KFNH** 890 500 Shenandoah, Iowa.  
Henry Field Co.

**KFOR** 1210 100 Lincoln, Neb.  
Howard Shuman

**KFOX** 1250 1000 Long Beach, Calif.  
Nicholas & Warinner, Inc.

**KFPL** 1310 100 Dublin, Texas.  
C. C. Baxter, Box 176

**KFPM** 1310 15 Greenville, Texas.  
New Furniture Co.

**KFPW** 1210 100 Fort Smith, Ark.  
Southwestern Hotel Co.

**KFPY** 1340 1000 Spokane, Wash.  
Symons Broadcasting Co.

**KFQD** 900 250 Anchorage, Alaska  
Anchorage Radio Club, Inc.

**KFRC** 810 1000 San Francisco, Calif.  
Don Lee, Inc.

**KFRU** 930 500 Columbia, Mo.  
KFRU, Inc., 9th and Elm Sts.

**KFSB** 900 1000 San Diego, Calif.  
Airfan Radio Corp., Ltd.

**KFSQ** 1120 500 Los Angeles, Calif.  
Echo Park Evangelistic Assn.

**KFUO** 550 500 St. Louis, Mo.  
Evangelical Lutheran Church.

**KFVD** 1000 250 Los Angeles, Calif.  
E. L. Cord, 645 S. Mariposa.

**KFVS** 1210 100 Cape Girardeau, Mo.  
Oscar C. Hirsch, Box 275.

**KFWB** 950 1000 Hollywood, Calif.  
Warner Bros. Motion Pictures, Inc.

**KFWI** 930 500 San Francisco, Calif.  
Radio Entertainments, Ltd.

**KFXD** 1200 100 Nampa, Idaho.  
Frank E. Hurt, 1024 12th Ave., S.

**KFXF** 920 500 Denver, Colo.  
Colorado Radio Corp.

**KFXJ** 1200 100 Grand Jct., Colo.  
Western Slope Broadcasting Co.

**KFXM** 1210 100 San Bernardino, Calif.  
Lee Bros. Broadcasting Co.

**KFXR** 1310 100 Oklahoma City, Okla.  
Exchange Avenue Baptist Church.

**KFYO** 1310 100 Lubbock, Texas.  
Kirksey Bros., Hotel Lubbock.

**KFYR** 550 1000 Bismarck, N. D.  
Mayer Broadcasting Co.

**KGA** 1470 5000 Spokane, Wash.  
Northwest Broadcasting Co., Inc.

**KGAR** 1370 100 Tucson, Ariz.  
Tucson Motor Service Co.

**KGB** 1330 1000 San Diego, Calif.  
Don Lee Broadcasting System

**KGBU** 900 500 Ketchikan, Alaska.  
Alaska Radio & Service Co., Inc.

**KGBX** 1310 100 Springfield, Mo.  
KGBX, Inc.

**KGBZ** 930 500 Yerk, Neb.  
KGBZ Broadcasting Co., 715 Grant Ave.

**KGCA** 1270 100 Decorah, Iowa  
Charles W. Greenley

**KGCR** 1210 100 Watertown, S. D.  
Greater Kampeska Radio Corp.

**KGCU** 1240 250 Mandan, N. D.  
Mandan Radio Assn.

**KGCX** 1310 100 Wolf Point, Mont.  
E. E. Krebsbach.

**KQDE** 1200 100 Fergus Falls, Minn.  
C. L. Jaren.

**KQDM** 1100 250 Stockton, Calif.  
E. F. Peffer, 42 S. Calif. St.

**KQDY** 1340 250 Huron, S. D.  
Voice of S. D., Inc., 347 Dakota Ave.

**KQEK** 1200 100 Yuma, Colo.  
Elmer G. Beehler, 109 W. 2nd St.

**KGER** 1360 1000 Long Beach, Calif.  
Consolidated Broadcasting Co.

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**KGEZ** 1310 100 Kalispell, Mont.  
Donald C. Treloar, Box 1.

**KGFF** 1420 100 Shawnee, Okla.  
KGFF Broadcasting Co., Inc.

**KGFQ** 1370 100 Oklahoma City, Okla.  
Oklahoma Broadcasting Co., 1113 N. Broadway

**KGFI** 1500 100 Corpus Christi, Texas.  
Eagle Broadcasting Co., Inc.

**KGFJ** 1200 100 Los Angeles, Calif.  
Ben S. McGlashan, 1417 S. Figueroa.

**KGFK** 1500 100 Moorhead, Minn.  
Red River Broadcasting Co., Inc.

**KGFL** 1370 100 Roswell, N. M.  
KGFL, Inc., 507 N. Main St.

**KGFV** 1310 100 Kearney, Neb.  
Central Nebraska Broadcasting Corp.

**KGFY** 880 200 Pierre, S. D.  
Dana McNeil, 510 Summit Ave.

**KGQC** 1420 100 San Francisco, Calif.  
Golden Gate Broadcasting Co.

**KGQF** 1010 500 Coffeyville, Kans.  
Hugh J. Powell and Stanley Plaza.

**KGQM** 1230 250 Albuquerque, N. M.  
New Mexico Broadcasting Co.

**KGHF** 1320 250 Pueblo, Colo.  
C. P. Ritchie & Geo. J. Ikelman

**KGHI** 1200 100 Little Rock, Ark.  
Lloyd Judd Co., Marion Hotel.

**KGHL** 050 1000 Billings, Mont.  
Northwestern Auto Supply Co.

**KGIR** 1380 500 Butte, Mont.  
KGR, Inc., 121 W. Broadway.

**KGIW** 1420 100 Alamosa, Colo.  
Leonard E. Wilson, 326 N. Commercial

**KGIX** 1420 100 Las Vegas, Nev.  
J. M. Heaton, Box 650.

**KGKB** 1500 100 Tyler, Texas.  
East Texas Broadcasting Co.

**KGKL** 1370 100 San Angelo, Texas.  
KGKL, Inc., St. Angelo Hotel.

**KGKO** 570 250 Wichita Falls, Texas.  
Wichita Falls Broadcasting Co.

**KGKY** 1500 100 Scottsbluff, Neb.  
Hilliard Co., Inc., 1517 1/2 Broadway.

**KGMB** 1320 250 Honolulu, T. H.  
Honolulu Broadcasting Co., 119 Merchant St.

**KGNF** 1430 500 North Platte, Neb.  
Great Plains Broadcasting Co.

**KGNO** 1340 250 Dodge City, Kans.  
KGNO Broadcasting Station

**KGO** 780 7500 San Francisco, Calif.  
National Broadcasting Co., Inc.

**KGRS** 1410 1000 Amarillo, Texas.  
E. B. Glah, Bellaire Park.

**KGU** 750 2500 Honolulu, T. H.  
Advertiser Publishing Co., Ltd.

**KGVO** 1200 100 Missoula, Mont.  
Mosby, Inc., 240 N. Higgins.

**KGW** 820 1000 Portland, Ore.  
Oregonian Publishing Co.

**KGY** 1210 100 Olympia, Wash.  
KGY, Inc., 11th and Capitol Way.

**KHJ** 900 1000 Los Angeles, Calif.  
Don Lee Broadcasting System.

**KHQ** 590 1000 Spokane, Wash.  
Louis Wasmmer, Inc.

**KICA** 1370 100 Clevis, N. M.  
Southwest Broadcasting Co.

**KICK** 1420 100 Carter Lake, Iowa.  
Red Oak Radio Corp.

**KID** 1320 250 Idaho Falls, Idaho.  
KID Broadcasting Co., Inc.

**KIDO** 1350 1000 Boise, Idaho.  
C. G. Phillips & Frank L. Hill.

**KIDW** 1420 100 Lamar, Colo.  
Lamar Broadcasting Co., Box 688

**KIEM** 1210 100 Eureka, Calif.  
Harold H. Hanseth, Vance Hotel.

**KIEV** 850 100 Glendale, Calif.  
Cannon System, Ltd., Glendale Hotel.

**KIFH** 1310 100 Juneau, Alaska  
Juneau Broadcasting Co.

**KIT** 1310 100 Yakima, Wash.  
Valley Broadcasters, Inc.

**KJBS** 1070 100 San Francisco, Calif.  
Julius Brunton & Sons Co.

**KJB** 970 5000 Seattle, Wash.  
Fishers Blend Station, Inc.

**KLCN** 1290 100 Blytheville, Ark.  
C. L. Lintzenleh, Main and Division St.

**KLO** 1400 500 Ogden, Utah.  
Interstate Broadcasting Co.

**KLPM** 1240 250 Minot, N. D.  
John B. Cooley.

**KLRA** 1390 1000 Little Rock, Ark.  
Arkansas Broadcasting Co.

**KLS** 1440 250 Oakland, Calif.  
Warner Bros., 2201 Telegraph Ave.

**KLUF** 1370 100 Galveston, Texas.  
Geo. R. Clough, 3327 Ave. F.

**KLX** 880 1000 Oakland, Calif.  
Tribune Building Co.

**KLZ** 580 1000 Denver, Colo.  
Reynolds Radio Co., Inc.

**KMA** 830 500 Shenandoah, Iowa.  
Earl E. May Seed & Nursery Co.

**KMAC** 1370 100 San Antonio, Texas.  
W. W. McAllister, Blue Bonnet Hotel.

**KMBC** 950 1000 Kansas City, Mo.  
Midland Broadcasting Co.

**KMED** 1310 100 Medford, Ore.  
Mrs. W. J. Virgin, Sparta Bldg.

**KMJ** 580 500 Fresno, Calif.  
James McClatchy Co.

**KMLB** 1200 100 Menzies, La.  
Liners Broadcasting Station, Inc.

**KMMJ** 740 1000 Clay Center, Neb.  
The M. M. Johnson Co.

**KMO** 1330 250 Tacoma, Wash.  
KMO, Inc., Hotel Winthrop.

**KMOX** 1090 5000 St. Louis, Mo.  
The Voice of St. Louis, Inc.

**KMPG** 710 500 Beverly Hills, Calif.  
Beverly Hills Broadcasting Corp.

**KMTR** 570 580 Hollywood, Calif.  
KMTR Radio Corp., 915 N. Formosa Ave.

**KNOW** 1500 100 Austin, Texas.  
Southwest Broadcasting Co.

**KNX** 1050 25000 Hollywood, Calif.  
Western Broadcast Co., Inc.

**KOA** 830 12,500 Denver, Colo.  
General Electric Co., 1370 Krameria St.

**KOAC** 550 1000 Corvallis, Ore.  
Oregon State Agricultural College.

**KOB** 1180 10000 Albuquerque, N. M.  
Albuquerque Journal, Box 667.

**KOH** 1380 500 Reno, Nev.  
The Bee, Inc.

**KOIL** 1250 1000 Council Bluffs, Iowa.  
Mons Motor Oil Co.

**KOIN** 940 1000 Portland, Ore.  
KOIN, Inc., New Heathman Hotel.

**KOL** 1270 1000 Seattle, Wash.  
Seattle Broadcasting Co.

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KOMA 1480 6000 Oklahoma City, Okla. National Radio Manufacturing Co.	KTFI 1240 1000 Twin Falls, Idaho. Radio Broadcasting Corp.
KOMO 920 1000 Seattle, Wash. Fishers Blend Station, Inc.	KTHS 1040 10000 Hot Springs, Ark. Chamber of Commerce.
KONO 1370 100 San Antonio, Texas. Mission Broadcasting Co., St. Anthony Hotel.	KTM 780 500 Los Angeles, Calif. Pickwick Broadcasting Corp., Ltd.
KOOS 1370 100 Marshfield, Ore. H. H. Hanseth, Hall Bldg.	KTRH 1120 1000 Houston, Texas. KTRH Broadcasting Co., Rice Hotel.
KORE 1420 100 Eugene, Ore. Frank L. Hill and Curtis G. Phillips.	KTSA 1200 1000 San Antonio, Texas. Southwest Broadcasting Co.
KOY 1390 500 Phoenix, Ariz. Nielsen Radio & Sporting Goods Co.	KTSM 1310 100 El Paso, Texas. Tri-State Broadcasting Co., Inc.
KPCB 650 100 Seattle, Wash. Queen City Broadcasting Co.	KTUL 1400 250 Tulsa, Okla. J. T. Griffin
KPJM 1500 100 Prescott, Ariz. Frank Mauthe, Box 852	KTW 1220 1000 Seattle, Wash. First Presbyterian Church.
KPO 880 50000 San Francisco, Calif. National Broadcasting Co., Inc.	KUJ 1370 100 Walla Walla, Wash. KUJ, Inc., Marcus Whitman Hotel.
KPOF 880 500 Denver, Colo. Pillar of Fire, 1845 Champa St.	KUMA 1420 100 Yuma, Ariz. Dr. A. H. Schermann, Box 267.
KPPC 1210 50 Pasadena, Calif. Pasadena Presbyterian Church.	KUOA 1280 1000 Fayetteville, Ark. KUOA, Inc., Washington Hotel.
KPQ 1500 100 Wenatchee, Wash. Westcoast Broadcasting Co.	KUSD 890 500 Vermillion, S. D. University of South Dakota.
KPRC 820 1000 Houston, Texas. Houston Printing Co.	KVI 670 500 Tacoma, Wash. Puget Sound Broadcasting Co., Tacoma Hotel.
KQV 1380 500 Pittsburgh, Pa. KQV Broadcasting Co., Investment Bldg.	KVL 1370 100 Seattle, Wash. KVL, Inc., 5th and Virginia St.
KQW 1010 500 San Jose, Calif. Pacific Agricultural Foundation, Ltd.	KVOA 1280 500 Tucson, Ariz. Arizona Broadcasting Co., Inc.
KRE 1370 100 Berkeley, Calif. First Congregational Church.	KVOO 1140 25000 Tulsa, Okla. Southwestern Sales Corp.
KREG 1500 100 Santa Ana, Calif. The Voice of the Orange Empire, Inc.	KVOR 1270 1000 Colorado Springs, Colo. S. H. Patterson
KRGV 1280 500 Harlingen, Texas. KRGV, Inc.	KVOS 1200 100 Bellingham, Wash. KVOS, Inc., Bellingham Hotel.
KRKD 1120 500 Los Angeles, Calif. Firestone Broadcasting Corp.	KWCR 1420 100 Cedar Rapids, Iowa. Cedar Rapids Broadcast Co.
KRLD 1040 10000 Dallas, Texas. KRLD Radio Corp., Adolphus Hotel.	KWEA 1210 100 Shreveport, La. International Broadcasting Corp.
KRMD 1310 100 Shreveport, La. Radio Station KRMD, Inc.	KWFF 1210 100 Hilo, Hawaii Hilo Broadcasting Co., Ltd.
KROW 830 500 Oakland, Calif. Educational Broadcasting Corp.	KWG 1200 100 Stockton, Calif. McClatchy Newspapers, Inc.
KRSC 1120 100 Seattle, Wash. Radio Sales Corp., Washington Athletic Club.	KWJJ 1080 500 Portland, Ore. KWJJ Broadcast Co., Inc., 328 Salmon St.
KSAC 580 500 Manhattan, Kans. State College of Agriculture.	KWK 1350 1000 St. Louis, Mo. Thomas Patrick, Inc., Hotel Chase.
KSCJ 1330 1000 Sioux City, Iowa. Perkins Bros. Co., 415 Douglas St.	KWKC 1370 100 Kansas City, Mo. Wilson Duncan Broadcasting Co.
KSD 550 500 St. Louis, Mo. Pulitzer Publishing Co.	KWKH 850 10000 Shreveport, La. International Broadcasting Corp.
KSEI 890 250 Pocatello, Idaho. Radio Service Corp., 141 S. 8th Ave.	KWLC 1270 100 Decorah, Iowa. Luther College.
KSL 1130 50000 Salt Lake City, Utah. Radio Service Corp. of Utah.	KWSC 1220 1000 Pullman, Wash. State College of Washington.
KSO 1370 100 Des Moines, Iowa. Des Moines Register & Tribune.	KWTO 560 500 Springfield, Mo. KGBX Inc.
KSOO 1110 1000 Sioux Falls, S. D. Jos. Henkin, 1613 S. Duluth Ave.	KWWG 1280 500 Brownsville, Texas. Frank P. Jackson.
KSTP 1480 10000 St. Paul, Minn. National Battery Broadcasting Co.	KXA 780 250 Seattle, Wash. American Radio Tel. Co., 218 Bigelow Bldg.
KSUN 1200 100 Lowell, Ariz. Copper Electrical Co.	KXL 1420 100 Portland, Ore. KXL Broadcasters, 289 Pine St.
KTAB 500 1000 San Francisco, Calif. Associated Broadcasters, Inc.	KXO 1500 100 El Centro, Calif. E. R. Irey and F. M. Bowles.
KTAR 820 500 Phoenix, Ariz. KTAR Broadcasting Co.	KXRO 1310 100 Aberdeen, Wash. KXRO, Inc., Hotel Morek.
KTAT 1240 1000 Fort Worth, Texas. Southwest Broadcasting Co.	KXYZ 1440 250 Houston, Texas. Harris County Broadcast Co.
KTBS 1450 1000 Shreveport, La. Tri-State Broadcasting System.	KYA 1230 1000 San Francisco, Calif. Pacific Broadcasting Corp.

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KYW 1020 10000 Chicago, Ill. Westinghouse Elec. & Mfg. Co.	WAIU 840 500 Columbus, Ohio. Associated Radio Broadcasting Corp.
KZRM 918.5 50000 Manila, P. I. Erlander and Galing, Inc. (KZEG)	WALR 1210 100 Zanesville, Ohio. WALR Broadcasting Corp.
LR5 830 25000 Buenos Aires, Arg.	WAMC 1420 100 Anniston, Ala. R. C. Hammett, 1200 Noble St.
NAA 800 1000 Arlington, Va. United States Navy.	WAML 1310 100 Laurel, Miss. Southland Radio Corp.
RUS 684 500 San Salvador, E. S. Republic of El Salvador.	WAPI 1140 5000 Birmingham, Ala. WAPI Broadcasting Corp.
TGW 1350 500 Guatemala, Gua. Gobierno de Guatemala.	WARD 1400 500 Brooklyn, N. Y. United States Broadcasting Corp.
TGX 1380 75 Guatemala City	WASH 1270 500 Grand Rapids, Mich. Kunsky-Trendle Broadcasting Corp.
TIGR 812 75 San Jose, C. R. Government of Costa Rica.	WAVE 840 1000 Louisville, Ky. WFIW, Inc.
TIEA 833 7.5 San Jose, C. R.	WAWZ 1350 250 Zarephath, N. J. Pillar of Fire.
TIEP 1450 7.5 San Jose, C. R.	WAZL 1420 100 Hazleton, Pa. Hazleton Broadcasting Service, Inc.
TIFB 714 30 San Jose, C. R.	WBAA 1400 500 West Lafayette, Ind. Purdue University.
TIFS 1441 7.5 Cartago, C. R.	WBAK 1430 1000 Harrisburg, Pa. Commonwealth of Pennsylvania.
TIGA 1014 30 Cartago, C. R.	WBAL 1080 10000 Baltimore, Md. Consolidated Gas, Elec. Light & Power Co.
TIGP 800 75 San Jose, C. R. Gonzalo Pinto H. Apt. 225.	WBAP 800 50000 Fort Worth, Texas. Carter Publications, Inc.
TIRCA 1100 500 San Jose, C. R. Perry Gorton, Apt. 225.	WBAX 1210 100 Wilkes-Barre, Pa. John H. Stenger, Jr., 70 S. Main St.
TISO 550 250 San Jose, C. R. P. F. Saborio, Apt. 1354	WBBC 1400 500 Brooklyn, N. Y. Brooklyn Broadcasting Corp.
TITV 899 7.5 San Jose, C. R.	WBBL 1210 100 Richmond, Va. Grace Covenant Presbyterian Church.
TIVL 889 30 San Jose, C. R.	WBBM 770 25000 Chicago, Ill. WBBM Broadcasting Corp., Wrigley Bldg.
TIXA 014 7.5 San Jose, C. R. J	WBBR 1300 1000 Brooklyn, N. Y. Peoples Pulpit Assn.
VAS 685 2000 Glace Bay, N. S. Canadian Maroon Co., Ltd.	WBSX 1200 100 New Orleans, La. Samuel D. Reeks, Marbers Hotel.
VESEK 1195 10 Montmagny, Que. J. A. Marquis, P. O. Box 57	WBSZ 1200 100 Ponce City, Okla. C. L. Carrell.
VOAC 000 40 St. John's, Nfld.	WBCM 1410 500 Bay City, Mich. James E. Davidson, Hotel Wrenn.
VOAS 010 100 St. John's, N. F.	WBEN 900 1000 Buffalo, N. Y. WBEN, Inc. (Buffalo Evening News.)
VOBS 010 100 St. John's, N. F.	WBEO 1310 100 Marquette, Mich. Lake Superior Broadcasting Co., Inc.
VOBY 950 75 St. John's, N. F. Newfoundland Broadcasting Co.	WBHS 1200 100 Huntsville, Ala. Radio Station WBHS, Inc.
VOKW 1085 30 St. John's, N. F. Cyril L. Parkins.	WBIS 1440 500 Greensboro, N. C. North Carolina Broadcasting Co., Inc.
VONF 1195 400 St. John's, N. F. Dominion Broadcasting Co., Ltd., Box 1355.	WBNX 1350 250 New York, N. Y. Standard Cahill Co., Inc.
VOWR 000 500 St. John's, N. F. Weeley United Church, Box 157.	WBOQ 800 50000 New York, N. Y. Atlantic Broadcasting Corp.
WAAB 1410 500 Boston, Mass. Bay State Broadcasting Corp., 1 Winter Pl.	WBOW 1310 100 Terre Haute, Ind. Banks of Wabash, Inc., 24 1/2 S. 8th.
WAFF 020 500 Chicago, Ill. Chicago Daily Drivers Journal.	WBRC 030 500 Birmingham, Ala. Frank M. King, Receiver.
WAAT 840 300 Jersey City, N. J. Bremer Broadcasting Corp., 50 Journal Sq.	WBRE 1310 100 Wilkes-Barre, Pa. Louis G. Baltimore, 16 N. Main.
WAAW 800 500 Omaha, Neb. Omaha Grain Exchange.	WBRO 820 500 Babylon Park, Mass. Broadcasting Service Organization, Inc.
WABC 880 50000 New York, N. Y. Atlantic Broadcasting Corp.	WBT 1080 50000 Charlotte, N. C. Station WBT, Inc., Wilder Bldg.
WABI 1200 100 Bangor, Maine. First Universalist Society.	WBTV 1370 100 Danville, Va. Fiedmont Broadcasting Corp.
WACO 1420 100 Waco, Texas. Southwest Broadcasting Co.	WBZ 890 50000 Boston, Mass. Westinghouse Elec. & Mfg. Co.
WADC 1320 1000 Akron, Ohio. Allen T. Simmons, P. O. Box 29.	WBZA 890 1000 Springfield, Mass. Westinghouse Elec. & Mfg. Co.
WAGM 1420 100 Presque Isle, Me. Aroostook Broadcasting Corp.	



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WCAC 800 250 Storrs, Conn. Connecticut Agricultural College.	WDEV 550 500 Waterbury, Vt. Harry C. Whitehill, Stowe St.
WCAD 1220 500 Canton, N. Y. St. Lawrence University.	WDGY 1190 1000 Minneapolis, Minn. Dr. Geo. W. Young, 909 W. Broadway.
WCAE 1220 1000 Pittsburgh, Pa. WCAE, Inc., Sun-Telegraph.	WDOD 1280 1000 Chattanooga, Tenn. WDOD Broadcasting Corp., Hotel Patten.
WCAH 1430 500 Columbus, Ohio. International Bible Students Assn.	WDRC 1330 1000 Hartford, Conn. WDRC, Inc., Corning Bldg., 11 Asylum St.
WCAL 1250 1000 Northfield, Minn. St. Olaf College.	WDSU 1250 1000 New Orleans, La. Jos. H. Uhalt, On Hotel DeSoto.
WCAM 1280 500 Camden, N. J. City of Camden, City Hall.	WDZ 1070 100 Tuscola, Ill. James L. Bush.
WCAO 600 250 Baltimore, Md. Monumental Radio Co.	WEAF 880 50000 New York, N. Y. National Broadcasting Co., Inc.
WCAP 1280 500 Asbury Park, N. J. Radio Industries Broadcast Co.	WEAN 700 500 Providence, R. I. Shepard Broadcasting Service, Inc.
WCAT 1200 100 Rapid City S. D. South Dakota State School of Mines.	WEBC 1290 1000 Superior, Wis. Head of the Lakes Broadcasting Co.
WCAU 1170 50000 Philadelphia, Pa. WCAU Broadcasting Co., 1622 Chestnut.	WEHQ 1210 100 Harrisburg, Ill. Harrisburg Broadcasting Co.
WCAX 1200 100 Burlington, Vt. Burlington Daily News, Inc.	WEHR 1310 100 Buffalo, N. Y. Howell Broadcasting Co., Inc., 735 Main.
WCAZ 1070 50 Carthage, Ill. Superior Broadcasting Service, Inc.	WEDC 1210 100 Chicago, Ill. Emil Denmark, 3860 Ogden Ave.
WCBA 1440 250 Allentown, Pa. B. Bryan Musselman, 39-41 10th St.	WEED 1420 100 Greenville, N. C. Wm. Avera Wynne.
WCBD 1080 5000 Zion, Ill. Wilbur Glenn Voliva.	WEEI 590 1000 Boston, Mass. Edison Elec. Illuminating Co.
WCBM 1370 100 Baltimore, Md. Baltimore Broadcasting Corp.	WEEU 830 1000 Reading, Pa. Berks Broadcasting Co., 533 Penn.
WCBS 1210 100 Springfield, Ill. WCBS, Inc., 208½ S. 5th.	WEHC 1350 500 Charlottesville, Va. Community Brdcastg. Corp.
WCCO 810 50000 Minneapolis, Minn. Northwestern Broadcasting, Inc.	WEHS 1420 100 Cicero, Ill. WEHS, Inc., 6138 W. 22nd St.
WCFL 870 1600 Chicago, Ill. Chicago Federation of Labor.	WELL 1420 500 Battle Creek, Mich. Enquirer News Co., 7 N. McCamly St.
WCKY 1490 5000 Covington, Ky. L. B. Wilson, Inc.	WENG 1420 100 Americus, Ga. Americus Broadcast Corp.
WCLO 1200 100 Janesville, Wis. WCLO Radio Corp.	WENR 870 50000 Chicago, Ill. Great Lakes Broadcasting Co.
WCLS 1310 100 Joliet, Ill. WCLS, Inc., 301 E. Jefferson St.	WESG 1040 1000 Elmira, N. Y. Elmira Star Gazette, Inc.
WCNW 1500 100 Brooklyn, N. Y. Arthur Fiske, 1525 Pitkin Ave.	WEVD 1300 500 New York, N. Y. Jewish Daily Forward, Hotel Claridge.
WCOA 1340 500 Pensacola, Fla. Pensacola Broadcasting Co.	WEW 760 1000 St. Louis, Mo. St. Louis University, 221 N. Grand Blvd.
WCOC 890 500 Meridian, Miss. Mississippi Broadcasting Co., Inc.	WEXL 1310 50 Royal Oak, Mich. Royal Oak Broadcasting Co.
WCRW 1210 100 Chicago, Ill. Clinton R. White, 2756 Pine Grove Ave.	WFAA 890 50000 Dallas, Texas. Morning News and Journal
WCSC 1300 500 Charleston, S. C. South Carolina Broadcasting Co., Inc.	WFAB 1300 1000 New York, N. Y. Fifth Avenue Broadcasting Corp.
WCSH 940 1000 Portland, Mo. Congress Square Hotel Co., 157 High.	WFAM 1200 100 South Bend, Ind. South Bend Tribune, 200 W. Colfax.
WDAE 1220 1000 Tampa, Fla. Tampa Publishing Co., Tampa Terrace.	WFAA 1210 100 White Plains, N. Y. Westchester Broadcasting Corp.
WDAF 810 1000 Kansas City, Mo. Kansas City Star Co.	WFBC 1200 100 Greenville, S. C. Greenville News-Piedmont Co.
WDAG 1410 1000 Amarillo, Texas. National Radio & Broadcasting Corp.	WFBE 1200 100 Cincinnati, Ohio. WFBE, Inc., Hotel Sinton.
WDAH 1310 100 El Paso, Texas. Tri-State Broadcasting Co., Inc.	WFBG 1310 100 Altoona, Pa. Gable Broadcasting Co., 12th Av. & 13th St.
WDAS 1370 100 Philadelphia, Pa. WDAS Broadcastg. Co., Inc., Broadwood Hotel.	WFBL 1360 1000 Syracuse, N. Y. Onondaga Radio Broadcasting Corp.
WDAY 840 1000 Fargo, N. D. WDAY, Inc., Black Bldg., 118 Broadway.	WFBM 1230 1000 Indianapolis, Ind. Indianapolis Power & Light Co.
WDBJ 830 250 Roanoke, Va. Times World Corp., 122 W. Church Ave.	WFRB 1270 500 Baltimore, Md. Baltimore Radio Show, Inc.
WDSO 580 250 Orlando, Fla. Orlando Broadcasting Co., Inc.	WFDL 1310 100 Flint, Mich. Flint Broadcasting Co.
WDEL 1120 250 Wilmington, Del. WDEL, Inc., 10th and King Sts.	WFDV 1500 100 Rome, Ga. Rome Broadcasting Corp., 10 3rd Ave.

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WFEA 1430 500 Manchester, N. H. New Hampshire Broadcasting Co.	WHEB 740 250 Portsmouth, N. H. Granite State Broadcasting Corp.
WFI 500 500 Philadelphia, Pa. WFI Broadcasting Co., 801 Market.	WHEC 1430 500 Rochester, N. Y. WHEC, Inc., 40 Franklin St.
WFLA 920 1000 Clearwater, Fla. Florida West Coast Broadcasting Co., Inc.	WHEF 1600 100 Keesauke, Miss. Attala Milling & Produce Co.
WQAL 1310 100 Lancaster, Pa. WQAL, Inc., 8 W. King St.	WHET 1370 100 Dothan, Ala. Troy Broadcasting Co.
WGAR 1450 500 Cleveland, Ohio. WGAR Broadcasting Co., Hotel Statler.	WHFC 1420 100 Cicero, Ill. WHFC, Inc., 6138 W. 22nd St.
WGBB 1210 100 Freeport, N. Y. H. H. Carman, 64 S. Grove St.	WHIS 1410 250 Bluefield, W. Va. Daily Telegraph Printing Co., Inc.
WGBF 830 500 Evansville, Ind. Evansville On the Air, Inc.	WHK 1390 1000 Cleveland, Ohio. Radio Air Service Corp.
WGBI 830 250 Scranton, Pa. Scranton Broadcasters, Inc.	WHN 1010 250 New York, N. Y. Marcus Loew Booking Agency.
WGCM 1210 100 Mississippi City, Miss. Great Southern Land Co., Gulfport, Miss.	WHOM 1450 250 Jersey City, N. J. New Jersey Broadcasting Corp.
WGCP 1250 1000 Newark, N. J. May Radio Broadcasting Co.	WHP 1430 500 Harrisburg, Pa. WHP, Inc., Harrisburg Telegraph.
WGES 1360 500 Chicago, Ill. Oak Leaves Broadcasting Station, Inc.	WIAS 1310 100 Ottumwa, Iowa. Iowa Broadcasting Co., Hotel Ottumwa.
WGH 1310 100 Newport News, Va. Hampton Roads Broadcasting Corp.	WIBA 1280 500 Madison, Wis. Badger Broadcasting Co., Inc.
WGL 1370 100 Fort Wayne, Ind. F. C. Zieg, 213 W. Main St.	WIBG 870 100 Glenside, Pa. WIBG, Inc., Kewick Bldg.
WGLC 1370 100 Hudson Falls, N. Y. O. T. Griffin & G. F. Bissell.	WIBM 1370 100 Jackson, Mich. WIBM, Inc., Otsego Hotel.
WGN 720 50000 Chicago, Ill. WGN, Inc., Tribune Tower.	WIBU 1210 100 Payonette, Wis. Wm. C. Forrest, R. F. D. No. 3.
WGNV 1210 100 Chester, N. Y. Peter Goelst (Orange County).	WIBW 500 1000 Topeka, Kans. Topeka Broadcasting Assn. Inc.
WGR 550 1000 Buffalo, N. Y. Buffalo Broadcasting Corp.	WIBX 1200 100 Utica, N. Y. WIBX, Inc., 1st Natl. Bank Bldg.
WGST 890 250 Atlanta, Ga. Georgia School of Technology.	WICC 600 250 Bridgeport, Conn. Shepard Broadcasting Service, Inc.
WGY 790 50000 Schenectady, N. Y. National Broadcasting Co., Inc.	WIL 1200 100 St. Louis, Mo. Missouri Broadcasting Corp.
WHA 940 1000 Madison, Wis. University of Wisconsin.	WILL 890 250 Urbana, Ill. University of Illinois.
WHAD 1120 250 Milwaukee, Wis. Marquette University.	WILM 1420 100 Wilmington, Del. Delaware Broadcasting Co., Inc.
WHAM 1150 50000 Rochester, N. Y. Stromberg-Carlson Tel. Mfg. Co.	WIND 560 1000 Gary, Ind. Johnson-Kennedy Broadcasting Corp.
WHAS 820 50000 Louisville, Ky. Courier Journal & Louisville Times.	WINS 1100 500 New York, N. Y. American Radio News Corp.
WHAT 1310 100 Philadelphia, Pa. Curtis-Martin Newspapers, Inc.	WIOD 1300 1000 Miami, Fla. Isle of Dreams Broadcasting Corp.
WHAZ 1300 500 Troy, N. Y. Rensselaer Polytechnic Institute.	WIP 010 500 Philadelphia, Pa. Pennsylvania Broadcasting Co.
WHB 860 500 Kansas City, Mo. WHB Broadcasting Co., Scarritt Bldg.	WIS 1010 500 Columbia, S. C. Station WIS, Inc., 1811 Main St.
WHBC 1200 100 Canton, Ohio. Edw. P. Graham, 319 Tusc. St., W.	WISN 1120 250 Milwaukee, Wis. American Radio News Corp.
WHBD 1370 100 Mount Orah, Ohio. F. P. Moler.	WJAC 1310 100 Johnstown, Pa. WJAC, Inc., Tribune Bldg. Annex.
WHBF 1210 100 Rock Island, Ill. Rock Island Broadcasting Co.	WJAG 1060 1000 Norfolk, Neb. Norfolk Daily News.
WHBL 1410 500 Sheboygan, Wis. Press Publishing Co.	WJAN 890 500 Providence, R. I. Outlet Co., Weybossett St.
WHBQ 1370 100 Memphis, Tenn. Broadcasting Sta. WNBQ, Inc., Hotel Claridge.	WJAS 1200 1000 Pittsburgh, Pa. Pittsburgh Radio Supply House.
WHBU 1210 100 Anderson, Ind. Anderson Broadcasting Corp.	WJAX 000 1000 Jacksonville, Fla. City of Jacksonville.
WHBY 1200 100 Green Bay, Wis. WHBY, Inc., Bellin Bldg.	WJAY 010 500 Cleveland, Ohio. Cleveland Radio Broadcasting Corp.
WHDF 1370 100 Calumet, Mich. Upper Michigan Broadcasting Co.	WJBC 1200 100 LaSalle, Ill. Kaskaskia Broadcasting Co.
WHDH 030 1000 Boston, Mass. Matheon Radio Co., 62 Boylston.	WJBI 1210 100 Red Bank, N. J. Monmouth Broadcasting Co., Inc.
WHDL 1420 100 Tupper Lake, N. Y. Tupper Lake Broadcasting Co.	WJBK 1370 50 Detroit, Mich. James F. Hopkins, Inc., Curtis Bldg.

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WJBL 1290 100 Decatur, Ill. Commodore Broadcasting, Inc.	WLSC 1318 100 Muncie, Ind. D. A. Burton, Anthony Bldg.
WJBO 1420 100 Baton Rouge, La. Baton Rouge Broadcasting Co., Inc.	WLSF 1420 100 Kansas City, Kans. WLSF Broadcasting Co., Huron Bldg.
WJBW 1290 100 New Orleans, La. C. C. Carlson, 2743 Dumaine St.	WLSL 900 2500 Stevens Point, Wis. Wisconsin Dept. of Agriculture and Markets.
WJBY 1210 100 Gadsden, Ala. Gadsden Broadcasting Co., 112 N. 8th St.	WLSW 1290 500 Erie, Pa. Broadcasters of Pennsylvania, Inc.
WJDX 1278 1000 Jackson, Miss. Lamar Life Insurance Co.	WLSZ 620 500 Sengor, Me. Maine Broadcasting Co., Inc., 100 Main.
WJEJ 1218 100 Hagerstown, Md. Hagerstown Broadcasting Co., Inc.	WLEC 1340 250 Portland, Me. Casco Bay Broadcasting Co.
WJEM 990 500 Tupelo, Miss. Britt A. Rogers, Jr.	WLEY 1270 100 Lexington, Mass. Albert S. Moffat
WJJD 1130 25000 Chicago, Ill. WJJD, Inc., 201 N. Wells St.	WLIT 590 500 Philadelphia, Pa. Lit Bros. Broadcasting System, Inc.
WJMS 1420 130 Ironwood, Mich. WJMS, Inc., St. James Hotel.	WLS 870 50000 Chicago, Ill. Agricultural Broadcasting Co.
WJR 760 10000 Detroit, Mich. WJR, Inc., Fisher Bldg.	WLTH 1400 500 Brooklyn, N. Y. Voices of Brooklyn, Inc.
WJSV 1460 10000 Washington, D. C. Old Dominion Broadcasting Co.	WLVA 1270 100 Lynchburg, Va. Lynchburg Broadcasting Corp.
WJTL 1370 100 Atlanta, Ga. Oglethorpe University.	WLW 700 50000 Cincinnati, Ohio. Crosley Radio Corp.
WJW 1210 180 Akron, Ohio. WJW, Inc., 41 S. High St.	WLWL 1100 5000 New York, N. Y. Missionary Society of St. Paul.
WJZ 730 50000 New York, N. Y. National Broadcasting Co., Inc.	WMAL 630 250 Washington, D. C. National Broadcasting Co., Inc.
WKAQ 1248 1000 San Juan, P. R. Radio Corp. of Porto Rico.	WMAQ 870 5000 Chicago, Ill. National Broadcasting Co., Inc.
WKAR 1840 1000 East Lansing, Mich. Michigan State College.	WMAZ 1420 100 Springfield, Mass. WMAZ, Inc., Hotel Stonehaven.
WKBB 1500 100 East Dubuque, Ill. Richard W. Hoffman	WMAZ 1130 500 Macao, Ga. Southeastern Broadcasting Co.
WKBC 1310 100 Birmingham, Ala. R. B. Broyles, Tutwiler Hotel.	WMBQ 1420 100 Detroit, Mich. Michigan Broadcasting Co.
WKBF 1400 600 Indianapolis, Ind. Indianapolis Broadcasting, Inc.	WMBD 1440 500 Peoria, Ill. Peoria Broadcasting Co.
WKBH 1380 1000 LaCrosse, Wis. WKBH, Inc., 409 Main St.	WMBQ 1210 100 Richmond, Va. Havens and Martin, Inc.
WKBH 1420 100 Cicero, Ill. WKBH, Inc., 6138 W. 22nd St.	WMBH 1420 100 Joplin, Mo. W. M. Robertson.
WKBN 570 500 Youngstown, Ohio. WKBN Broadcasting Corp.	WMBI 1090 5000 Chicago, Ill. Moody Bible Institute.
WKBO 1200 100 Harrisburg, Pa. Keystone Broadcasting Corp.	WMBQ 1310 100 Auburn, N. Y. WMBQ, Inc., Metcalf Bldg.
WKBV 1500 100 Richmond, Ind. Wm. O. Knox, Box 286	WMBQ 1500 100 Brooklyn, N. Y. Paul J. Gollhofer, 95 Leonard St.
WKBW 1480 5000 Buffalo, N. Y. Buffalo Broadcasting Corp.	WMBR 1370 100 Tampa, Fla. F. J. Reynolds, 907 Florida Ave.
WKBZ 1500 100 Ludington, Mich. Karl L. Ashbaker & Sons.	WMC 790 500 Memphis, Tenn. WMC, Inc., Hotel Gayoso.
WKEU 1500 100 LaGrange, Ga. Radio Station WKEU, 906 Hill St.	WMCA 570 500 New York, N. Y. Kleckerbocker Broadcasting Co.
WKFI 1210 100 Greenville, Miss. J. Pat Scully, Box 302.	WMNN 890 250 Fairmont, W. Va. A. M. Rowe, Inc., 325 Main St.
WKJC 1200 100 Lancaster, Pa. Lancaster Broadcasting Service, Inc.	WMPC 1500 100 Lapeer, Mich. First Methodist Protestant Church.
WKOK 1210 100 Sunbury, Pa. Sunbury Broadcasting Co.	WMT 800 500 Waterloo, Iowa. Waterloo Broadcasting Co.
WKRC 550 1000 Cincinnati, Ohio. WKRC, Inc., Hotel Alma.	WNAC 1230 1000 Boston, Mass. Shepard Broadcasting Service, Inc.
WKY 900 1000 Oklahoma City, Okla. Oklahoma Publishing Co.	WNAD 1010 500 Norman, Okla. University of Oklahoma.
WKZO 590 1000 Kalamazoo, Mich. John E. Fetser, Burdick Hotel.	WNAX 570 1000 Yankton, S. D. The House of Gurney, Inc., 2nd and Capital St.
WLAC 1470 5000 Nashville, Tenn. Life & Casualty Insurance Co.	WNBF 1500 100 Binghamton, N. Y. Howitt-Wood Radio Co., Inc.
WLAP 1200 100 Louisville, Ky. American Broadcasting Corp. of Ky.	WNBH 1310 100 New Bedford, Mass. New Bedford Broadcasting Co.
WLS 1250 1000 Minneapolis, Minn. University of Minnesota.	WNBO 1200 100 Silver Haven, Pa. John Brownlee Spriggs. (Washington, Pa.)

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WMBR 1430 500 Memphis, Tenn. Memphis Broadcasting Co., Hotel DeVoy.	WQAM 560 1000 Miami, Fla. Miami Broadcasting Co., Inc., 327 N. E. 1st Ave.
WNBW 1200 18 Carbondale, Pa. WNBW, Inc., 50 Main St., N.	WQAN 880 250 Scranton, Pa. Scranton Times, 149 Penn Ave.
WNBX 1290 250 Springfield, Vt. WNBX Broadcasting Corp., 39 Main St.	WQAO 1610 250 New York, N. Y. Marcus Loew Booking Agency.
WNBZ 1290 50 Saranac Lake, N. Y. Smith & Mace, 70 Broadway.	WQBC 1580 500 Vicksburg, Miss. Delta Broadcasting Co., Hotel Vicksburg.
WNEW 1250 1000 Newark, N. J. Wodaam Corp., 1060 Broad.	WQDM 1370 100 St. Albans, Vt. A. J. St. Antoine and E. J. Regan.
WNOX 580 1000 Knoxville, Tenn. WNOX, Inc.	WQDX 1210 100 Thomasville, Ga. Stevens Luke, 135 E. Jackson St.
WNRA 1420 100 Muscle Shoals, Ala. Kathryn Jones	WRAC 1370 100 Williamsport, Pa. WRAC, Inc., 244 W. 4th St.
WNYC 910 500 New York, N. Y. Dept. of Plant and Structures.	WRAM 1370 100 Wilmington, N. C. Wilmington Radio Assn., Princess St.
WOAI 1100 50000 San Antonio, Texas. Southern Industries, Inc., 1038 Navarro.	WRAY 1310 100 Reading, Pa. Reading Broadcasting Co., 533 Penn St.
WOBU 580 750 Charleston, W. Va. WOBU, Inc., Ruffner Hotel.	WRAX 1020 250 Philadelphia, Pa. WRAX Broadcasting Co., 217 S. Broad St.
WOC- 1090 50000 Des Moines, Iowa. WHO Central Broadcast. Co., 914 Walnut St.	WRBL 1200 100 Columbus, Ga. WRBL Radio Station, Inc.
WOCL 1210 50 Jamestown, N. Y. A. E. Newton, 840 N. Main St.	WRBX 1410 250 Roanoke, Va. Richmond Development Corp.
WODX 1410 500 Mobile, Ala. Mobile Broadcasting Corp., Battle House.	WRC 850 500 Washington, D. C. National Broadcasting Co., Inc.
WOI 840 5000 Ames, Iowa. Iowa State College.	WRDO 1370 100 Augusta, Me. WRDO, Inc., Augusta House.
WOKO 1430 500 Albany, N. Y. WOKO, Inc., Hotel Ten Eyck.	WRDW 1500 100 Augusta, Ga. Virgil V. Evans Co., 309 8th St.
WOL 1310 100 Washington, D. C. American Broadcasting Co., Annapolis Hotel.	WREC 800 500 Memphis, Tenn. WREC, Inc., Hotel Peabody.
WOMT 1210 100 Manitowoc, Wis. Francis M. Kadow, Box 328.	WREN 1220 100 Lawrence, Kans. Jenny Wren Co., 8th and Vermont St.
WOOD 1270 500 Grand Rapids, Mich. Kunsky-Trendle Broadcasting Corp.	WRHM 1250 1000 Minneapolis, Minn. Minnesota Broadcasting Corp., 115 E. Grant
WOPI 1500 100 Bristol, Tenn. Radiophone Broadcasting Station WOPI, Inc.	WRJN 1370 100 Racine, Wis. Racine Broadcasting Corp., Hotel Racine.
WOQ 1300 1000 Kansas City, Mo. Unity School of Christianity.	WRNY 1010 250 New York, N. Y. Marcus Loew Booking Agency.
WOR 710 5000 Newark, N. J. Bamberger Broadcasting Service, Inc.	WROL 1310 100 Knoxville, Tenn. Stuart Broadcasting Corp., 524 S. Gay.
WORC 1250 500 Worcester, Mass. Alfred F. Kleindienst, 60 Franklin St.	WRR 1250 500 Dallas, Texas. City of Dallas, Hilton Hotel.
WORK 1000 1000 York, Pa. York Broadcasting Co., 15 S. Beaver St.	WRUF 830 5000 Gainesville, Fla. State University.
WOS 630 500 Jefferson City, Mo. State Highway Control, Capitol Bldg.	WRVA 1110 5000 Richmond, Va. Larus & Bro. Co., Inc., 22nd and Gary St.
WOSU 570 750 Columbus, Ohio. Ohio State University.	WSAI 1330 1000 Cincinnati, Ohio. Crosley Radio Corp., 1329 Arlington.
WOV 1130 1000 New York, N. Y. International Broadcasting Corp.	WSAJ 1310 100 Grove City, Pa. Grove City College.
WOW 590 1000 Omaha, Neb. Woodmen of the World, 4th and Farnam.	WSAN 1440 250 Allentown, Pa. WSAN, Inc., 39 10th St.
WOWO 1100 10000 Fort Wayne, Ind. Main Auto Supply Co., 213 W. Main.	WSAN 1460 250 Fall River, Mass. Doughty & Welch Electric Co., Inc.
WPAD 1420 100 Paducah, Ky. Paducah Broadcasting Co., Inc.	WSAZ 1190 1000 Huntington, W. Va. WSAZ, Inc., 929 1/2 4th Ave.
WPAP 1010 250 New York, N. Y. Marcus Loew Booking Agency.	WSB 740 50000 Atlanta, Ga. Atlanta Journal, 7 N. Forsyth St.
WPEN 1500 100 Philadelphia, Pa. William Penn Broadcasting Co.	WSBC 1210 100 Chicago, Ill. Gene T. Dyer, 1258 S. Michigan Ave.
WPFB 1370 100 Hattiesburg, Miss. Otis P. Eure, Box 530.	WST 1230 500 South Bend, Ind. South Bend Tribune.
WPG 1100 5000 Atlantic City, N. J. Columbia Broadcasting System.	WSEN 1210 100 Columbus, Ohio. Columbus Broadcasting Corp., 144 S. High.
WPHR 1200 100 Petersburg, Va. WLBG, Inc., Medical Arts Bldg.	WSFA 1410 500 Montgomery, Ala. Montgomery Bldg. Co., Inc., Jeff. Dav. Bldg.
WPRO 1210 100 Providence, R. I. Cherry & Webb Broadcasting Co., 15 Chestnut.	WSIX 1210 100 Springfield, Tenn. 638 Tire & Vulcanizing Co.
WPTF 830 5000 Raleigh, N. C. Durham Life Insurance Co.	WSJS 1310 100 Winston-Salem, N. C. Winston-Salem Journal Co., 416 N. Marshall.

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**WSM 050 50000** Nashville, Tenn.  
National Life & Accident Insurance Co.  
**WSMB 1320 500** New Orleans, La.  
WSMB, Inc., Maison Blanche Bldg.  
**WSMK 1380 200** Dayton, Ohio.  
S. M. Krohn, Jr., 4th and Main St.  
**WSOC 1218 100** Charlotte, N. C.  
WSOC, Inc., Box 730.  
**WSPA 1420 100** Spartanburg, S. C.  
Virgil V. Evans, Ravenel and Avant St.  
**WSPD 1340 1000** Toledo, Ohio.  
Toledo Broadcasting Co., 505 Jefferson  
**WSUI 880 500** Iowa City, Iowa.  
State University of Iowa.  
**WSUN 820 1000** St. Petersburg, Fla.  
Florida Westcoast Broadcasting Co., Inc.  
**WSVS 1370 50** Buffalo, N. Y.  
Seneca Vocational High School.  
**WSYB 1500 100** Rutland, Vt.  
Phillip Weiss Music Co., 80 West St.  
**WSYR 570 250** Syracuse, N. Y.  
Central New York Broadcasting Corp.  
**WTAD 1440 500** Quincy, Ill.  
Illinois Broadcasting Corp., State and 6th.  
**WTAQ 580 750** Worcester, Mass.  
Worcester Telegram Publishing Co.  
**WTAM 1070 50000** Cleveland, Ohio.  
National Broadcasting Co., Inc.  
**WTAQ 1330 1000** Eau Claire, Wis.  
Gillette Rubber Co., Hotel Eau Claire.  
**WTAR 760 500** Norfolk, Va.  
WTAR Radio Corp., Walnwright Bldg.  
**WTAW 1120 500** College Station, Texas.  
Agricultural and Mechanical College.  
**WTAX 1210 100** Springfield, Ill.  
WTAX, Inc., 416 E. Capitol Ave.  
**WTBO 1420 100** Cumberland, Md.  
Associated Broadcasting Corp., Box 794.  
**WTEL 1310 100** Philadelphia, Pa.  
Foulkrod Radio Engineering Co., Inc.  
**WTFI 1450 500** Athens, Ga.  
Liberty Broadcasting Co., Costa Bldg.  
**WTIC 1060 50000** Hartford, Conn.  
Travelers Broadcasting Service Corp.  
**WTJS 1310 100** Jackson, Tenn.  
Sun Publishing Co., Sun Bldg.  
**WTMJ 820 1000** Milwaukee, Wis.  
The Journal Co., 333 W. State St.  
**WTNJ 1200 500** Trenton, N. J.  
Trenton Broadcasting Co., Stacy Trent Hotel  
**WTOC 1200 500** Savannah, Ga.  
Savannah Broadcasting Co., Inc., DeSoto Hotel.  
**WTRC 1310 50** Elkhart, Ind.  
Truth Radio Corp., Hotel Elkhart.  
**WVFW 1400 500** Brooklyn, N. Y.  
Paramount Brdcastg. Co., 1 Nevins St.  
**WWAE 1200 100** Hammond, Ind.  
Hammond Calumet Broadcasting Corp.  
**WWJ 820 1000** Detroit, Mich.  
Evening News Assn., 616 Lafayette Blvd.  
**WWL 850 10000** New Orleans, La.  
Loyola University, Roosevelt Hotel.  
**WWNC 570 1000** Asheville, N. C.  
Citizen Broadcasting Co., Inc., Flatiron Bldg.  
**WWRL 1500 100** Woodside, N. Y.  
Long Island Broadcasting Corp.  
**WWSW 1500 100** Pittsburgh, Pa.  
Walker & Downing Radio Corp.  
**WWVA 1160 5000** Wheeling, W. Va.  
West Virginia Broadcasting Corp.  
**WXYZ 1240 1000** Detroit, Mich.  
Kunsky-Trendle Broadcasting Corp.

**XE 1000 250** Guadalajara, Jal.  
Alberto Pales Souza, Juan Manuel 383  
**XEAB 1450 7.5** Nuevo Laredo, Tama.  
Homberto Garcia.  
**XEAC 1295 100** San Luis Potosi, S. L. P.  
Francisco de P. Cabrera.  
**XEAE 880 800** Tijuana, B. C.  
Adolfo Labastida, Jr., Ave. D 542.  
**XEAF 990 750** Nogales, Son.  
Manuel Mascareñas M., Hotel Central.  
**XEAI 1090 100** Mexico City, D. F.  
Carlos Gonzalez Caballero, Insurgentes 360.  
**XEAO 580 100** Mexicali, B. C.  
Luis L. Castro, C. Altamirano 156.  
**XEAW 885 10000** Reynosa, Tama.  
Internacional Broadcasting Co., S. A.  
**XEB 1030 10000** Mexico City, D. F.  
El Buen Tono, S. A., Buen Tono No. 6.  
**XEC 1000 50** Toluca, D. F.  
Jesus R. Benavides, Independencia 76.  
**XED 1155 500** Guadalajara, Jal.  
Radiofonografica de Guadalajara, S. A.  
**XEF 735 150000** Villa Acuna, Coah.  
Compania Radiodifusora de Acuna, S. A.  
**XEFA 1250 500** Mexico City, D. F.  
Eduardo Limon Segui, Meditarraneo 236  
**XEFB 1315 100** Monterrey, N. L.  
Jesus Quintanilla, 5 de Mayo Oriente 112.  
**XEFC 1050 100** Merida, Yuc.  
J. Molina Font, Calle 59, 517.  
**XEFE 985 100** Laredo, Tama.  
Rafael T. Carranza.  
**XEFG 1085 500** Mexico City, D. F.  
Ricardo Gonzales Montero, Tepic 48  
**XEFI 1290 250** Chihuahua, Chih.  
Feliciano Lopez Isles, Ap. 157.  
**XEFJ 1000 100** Monterrey, N. L.  
R. Juncos de la Vega, C. Morelos Oriente 759.  
**XEFO 840 5000** Mexico City, D. F.  
Partido Nacional Revolucionario.  
**XEFS 1800 40** Queretaro, Qro.  
Salvador Sanchez, Calle Montes 23.  
**XEFV 1400 100** Juarez, Chih.  
J. Onofre Meza, Ave. Lerdo Norte 521.  
**XEFW 1290 70** Tampico, Tama.  
J. Expedito Martinez, C. Madero Poniente 19.  
**XEFZ 1370 100** Mexico City, D. F.  
Manuel Zetina  
**XEH 1132 250** Monterrey, N. L.  
Tarnava y Cia, P. Mier 215.  
**XEI 1310 250** Morelia, Mich.  
Carlos Gutierrez M., F. I. Madero 545  
**XEJ 1015 500** Juarez, Chih.  
Juan G. Buttner, Ave. Lerdo 309.  
**XEK 990 100** Mexico City, D. F.  
Arturo Martinez, Jalapa No. 51  
**XEL 1000 40** Saltillo, Coah.  
Antonio Garza Castro, Aldama 59  
**XEN 711 1000** Mexico City, D. F.  
Cerveceria Modelo S. A., Motolinia 22.  
**XENT 1115 150000** Nueva Laredo, Tama.  
Cia Industrial Universal S. A., Apt. 47.  
**XEO 840 5000** Mexico City, D. F.  
Partido Nacional Revolucionario.  
**XEOK 760 2500** Tijuana, B. C.  
Carlos de la Sierra, (Box 1441, San Diego).  
**XEP 780 500** Mexico City, D. F.  
Cia Difusora de Mexico S. A., Durango 74.  
**XEPN 585 75000** Piedras Negras, Coah.  
Piedras Negras Broadcasting Co.  
**XER 735 150000** Villa Acuna, Coah.  
Compania Radiodifusora de Acuna, S. A.

# INDEX BY CALL LETTERS

**XES 1020 250** Tampico, Tama.  
Fernando Sada, Hotel Inglaterra.  
**XET 690 500** Monterrey, N. L.  
Cadena Radiodifusora Mexicana, S. A.  
**XETB 1390 125** Torreon, Coah.  
Jose A. Burmen, R. Corona 317.  
**XETH 880 100** Puebla, Pua.  
Ramon Huerta G., Calle 17, Oriente 6.  
**XETU 800 100** Pachuca, Hgo.  
Benito Castillo  
**XETW 830 500** Mexico City, O. F.  
Rafael M. Pena, Gante 4, 3er piso  
**XETZ 1210 500** Mexico City, D. F.  
Jose Alvarez del Villar, 92 Londres 190.  
**XEU 1010 100** Veracruz, Ver.  
Fernando Pazos Sosa, Vicario 12.  
**XEW 810 5000** Mexico City, D. F.  
Cadena Radiodifusora Mexicana S. A.  
**XEWV 1100 250** Veracruz, Ver.  
Horacio Remes, Calle Canal 42.  
**XEX 630 50** Monterrey, N. L.  
Luis F. Petit Jean, Aldama 932 Sur.  
**XEY 548.8 10** Merida, Yuc.  
Partido Socialista del Surest.  
**XEYZ 760 10000** Mexico City, D. F.  
Angel M. Diez, Ave. Juarez 48.

**XEZ 630 500** Merida, Yuc.  
Bartolome Garcia Correa, Calle 58 No. 497.  
**XFB 1290 1000** Jalapa, Ver.  
Gobierno del Estado de Veracruz.  
**XFC 805 350** Aguascalientes, Ags.  
Gobierno del Estado de Aguascalientes.  
**XFG 838.3 2000** Mexico City, D. F.  
Secretaria de Guerra y Marina.  
**XFO 840 5000** Mexico City, D. F.  
National Revolucionario Party.  
**XFX 840 500** Mexico City, D. F.  
Secretaria de Educacion Publica.  
**YVIB 060 5000** Caracas, Venz.  
Cia Ama Almacenes Americanos.  
**YVIB 882 100** Caracas, Venz.  
**YVIB 1200 1000** Caracas, Venz.  
Degwitz & Sibies.  
**10-AK 1200 15** Stratford, Ont.  
M. I. Higgins, 151 Ontario St.  
**10-BP 1200 15** Wingham, Ont.  
W. T. Cruickshank.  
**10-BQ 1200 15** Brantford, Ont.  
Tom and Harold Brown.  
**10-BU 1200 15** Canara, Sask.  
Canara Radio Assn.

## SHORT WAVE RELAY BROADCASTING STATIONS

### Grouped According to Network Programs Transmitted

Frequency in megacycles in first column, wavelength in meters in second column, schedule in third column, time being EST. The location of the broadcast band station is given in parentheses following the geographical location of the short wave transmitter.

#### COLUMBIA BROADCASTING SYSTEM

**W2XE-WABC**, Wayne, N. J. (New York, N. Y.)  
15.258 19.65 11 a.m. to 1 p.m.  
11.823 25.36 3 p.m. to 5 p.m.  
6.116 49.02 6 to 11 p.m.  
**W3XAU-WCAU**, Byberry, Pa. (Philadelphia, Pa.)  
9.585 31.28 Noon to 6 p.m.  
6.057 49.50 8 p.m. to 1 a.m.

#### NATIONAL "RED" NETWORK

**W1XAL-WEEI**, Boston, Mass. (Boston, Mass.)  
15.242 19.67 Sunday, 10 a.m. to 1 p.m.  
11.780 25.45 Sat., 5:30 to 11 p.m.; Sun., 6:30-8:30 p.m.  
**W2XAD-WGY**, Schenectady, N. Y. (Schenectady, N. Y.)  
15.320 19.57 Mon., Wed., Fri., Sun., 4-5 p.m.  
**W2XAF-WGY**, Schenectady, N. Y. (Schenectady, N. Y.)  
9.530 31.46 7:45 to 11 p.m.  
**W9XAA-WCFL**, Chicago, Ill. (Chicago, Ill.)  
17.780 16.86 Very Irregular  
11.840 25.35 Irregular  
6.076 49.34 3 to 6 p.m.

#### NATIONAL "BLUE" NETWORK

**W1XAZ-WBZ**, WBAZ, Millis, Mass. (Boston and Springfield, Mass.)  
9.560 31.36 6 a.m. to midnight

**W3XAL-WJZ**, Boundbrook, N. J. (New York, N. Y.)  
17.772 16.87 12:30 to 6:30 p.m., except Sat.  
6.096 49.17 Saturday 3 p.m. to midnight  
**W3XL-WJZ**, Boundbrook, N. J. (New York, N. Y.)  
6.425 46.66 Fri., 6 p.m. to 1 a.m.  
**W8XK-KDKA**, Saxonburg, Pa. (Pittsburgh, Pa.)  
21.451 13.93 7 a.m. to 2 p.m.  
15.204 19.72 10 a.m. to 4:15 p.m.  
11.870 25.25 4:30 to 10 p.m.  
6.140 48.83 4:30 p.m. to 12:30 a.m.

#### NATIONAL "RED" AND "BLUE" NETWORK

**VE9DR-CFCF**, Montreal, Quebec (Montreal, Quebec)  
6.005 49.93 Sun., noon to 11:15 p.m. Other days, 7:30 a.m. to midnight  
**VE9GW-CRCT**, Bowmanville, Ont. (Toronto, Ontario)  
6.092 49.22 Thurs., 7 a.m. to 4 p.m.; Fri. and Sat., 3 to 11 p.m.; Sun., 11 a.m. to 8 p.m.  
**W4XB-WIOD**, Miami Beach, Fla. (Miami Beach, Fla.)  
6.036 49.67 Irregular  
**W8XAL-WLW**, Mason, Ohio (Cincinnati, Ohio)  
6.060 49.43 Irregular  
**W9XP-WENR**, Downer's Grove, Ill. (Chicago, Ill.)  
6.100 49.15 Sat., silent; Sun., 1 to 2:30 p.m., 4:30 to 7 p.m., 9 p.m. to 2 a.m.; other days, 4:30 to 8 p.m., 9:30 p.m. to 2 a.m.

## Index by Frequencies and Dial Numbers

(Continued from page 74)

Call Letters	Frequency	Dial Number	Location
WWSW	ae	100 (25)	Pittsburgh, Pa. E-8:00-11:45
.....	z	100 P (25)	Chelsea, Mass. E
.....	z	100 DP	Hot Springs, Ark. C

**1510 kilocycles 198.6 meters**

CFRC	ak	100	Kingston, Ont. E
CKCR	ak	100	Kitchener, Ont. E-10:1:30; 4-11

# The Short Wave Stations

(Continued from page 37)

			6.718	44.62	KFY, Forward Base, Little America	14.830	20.21	WKU, Rocky Point, N. Y., Exp.	21.260	14.10	WBU, Rocky Point, N. Y., Exp.
			6.725	44.57	KFZ, Main Base, Little America	14.980	20.01	KAY, Manila, P. I., phone	21.300	14.07	WQW, Rocky Point, N. Y., Exp.
			6.733	44.53	WDB, Rocky Point, N. Y., Exp.	15.040	19.93	WQG, Rocky Point, N. Y., Exp.	21.410	14.00	WKK, Lawrenceville, N. J., phone
			6.740	44.48	WQO, Rocky Point, N. Y., Exp.	15.055	19.91	WNC, Hialeah, Fla., phone	21.451	13.93	W8XK, Pittsburg, Pa. (Saxonburg)
			6.755	44.53	KEQ, Kahuku, Hawaii, phone	15.204	19.72	W8XK, Pittsburg, Pa. (Saxonburg)	21.575	13.89	KFY, Forward Base, Little America
			6.762	44.53	WEJ, Rocky Point, N. Y., Exp.	15.242	19.67	W1XAL, Boston, Mass.			KFY, Main Base, Little America
			6.770	44.48	WOA, Lawrenceville, N. J., phone	15.258	19.65	W2XE, New York, N. Y. (Wayne, N. J.)	21.600	13.88	KFY, Forward Base, Little America
			6.785	44.38	KEL, Bolinas, Calif., Exp.	15.320	19.57	W2XAD, Schenectady, N. Y.	21.625	13.86	KFY, Main Base, Little America
			6.792	43.71	WEZ, Rocky Point, N. Y., Exp.	15.410	19.46	KWO, Dixon, Calif., phone			KFY, Forward Base, Little America
			6.800	43.27	WEB, Rocky Point, N. Y., Exp.	15.445	19.41	WKW, Rocky Point, N. Y., Exp.	35.200	8.52	High frequency inter-island phones of the
			6.835	43.23	WKP, Rocky Point, N. Y., Exp.	15.970	18.77	WKO, Rocky Point, N. Y., Exp.			Mutual Telephone Co., Hawaii
			6.850	43.13	WEO, Rocky Point, N. Y., Exp.	16.015	18.72	WQR, Rocky Point, N. Y., Exp.	54.000	5.55	Call letters as follows:
			6.858	43.09	KEB, Bolinas, Calif., Exp.	16.030	18.71	KKP, Kahuku, Hawaii, phone			Manawahu, Island of Oahu, KGXA-B-C-D-E-F-G
			7.370	40.67	WJN, Rocky Point, N. Y., Exp.	16.260	18.44	WLC, Lawrenceville, N. J., phone			Ulupakua, Island of Maui, KGXH-J
			7.400	40.51	WEM, Rocky Point, N. Y., Exp.	17.120	17.51	WOO, Ocean Gate, N. J., Ship phone			Waikii, Island of Hawaii, KGXK-L-M
			7.415	40.43	WEG, Rocky Point, N. Y., Exp.	17.600	17.04	KFY, Main Base, Little America			Kaunakaki, Island of Molokai, KGXN
			7.520	39.87	KDK-KKH, Kahuku, Hawaii, phone		17.01	KFY, Forward Base, Little America			Kalepa, Island of Kauai, KGXO
			7.610	39.40	KWX, Dixon, Calif., phone	17.772	16.87	W3XAL, New York, N. Y. (Boundbrook N. J.)			
			7.715	38.86	KEE, Bolinas, Calif., Exp.						
			8.630	34.74	WOO, Ocean Gate, N. J., Ship phone	17.860	16.78	WQC, Rocky Point, N. Y., Exp.			
			8.820	33.99	KFY, Forward Base, Little America	17.880	16.76	WQI, Rocky Point, N. Y., Exp.			
					KFZ, Main Base, Little America	17.900	16.75	WLL, Rocky Point, N. Y., Exp.			
			8.840	33.92	KFY, Forward Base, Little America	17.920	16.73	WQF, Rocky Point, N. Y., Exp.			
					KFZ, Main Base, Little America	17.940	16.71	WQB, Rocky Point, N. Y., Exp.			
			8.930	33.57	WAD-WEC, Rocky Point, N. Y., Exp.	18.020	16.64	KQJ, Bolinas, Calif., Exp.			
			8.940	33.54	KZGG, Cebu, P. I., Inter-island phone	18.050	16.34	WLA, Lawrenceville, N. J., phone			
					WKL, Rocky Point, N. Y., Exp.	18.860	15.89	WKM, Rocky Point, N. Y., Exp.			
			8.950	33.50	WEL, Rocky Point, N. Y., Exp.	18.880	15.88	WQH, Rocky Point, N. Y., Exp.			
			9.010	32.78	KFJ, Bolinas, Calif., Exp.	18.900	15.86	WDS, Rocky Point, N. Y., Exp.			
			9.170	32.70	KZGF, Manila, P. I., Inter-island phone	18.920	15.84	WQS, Rocky Point, N. Y., Exp.			
					WNA, Lawrenceville, N. J., phone	18.940	15.83	WTT, Rocky Point, N. Y., Exp.			
			9.448	31.74	WES, Rocky Point, N. Y., Exp.	18.960	15.81	WQD, Rocky Point, N. Y., Exp.	2.414	124.17	CFN, Grande Prairie, Alta., Police
			9.460	31.79	WKJ, New Brunswick, N. J., phone	18.980	15.79	WFX, Rocky Point, N. Y., Exp.			CFN, Lethbridge, Alta.
			9.470	31.66	WET, Rocky Point, N. Y., Exp.	19.220	15.60	WPK, Lawrenceville, N. J., phone			CFU, Peace River, Alta.
			9.480	31.62	WDA, Rocky Point, N. Y., Exp.	19.816	15.14	WKN, Lawrenceville, N. J., phone			CGJ, Edmonton, Alta.
			9.490	31.59	KZGH, Iloilo, P. I., Inter-island phone	19.980	15.01	KAX, Manila, P. I., phone			CGS, Calgary, Alta.
					WEF, Rocky Point, N. Y., Exp.	20.100	14.91	WQY, Rocky Point, N. Y., Exp.			CJW, St. John, N. B.
			9.530	31.46	W2XAF, Schenectady, N. Y.	20.180	14.85	WQX, Rocky Point, N. Y., Exp.			CKT, Penitentiary, N. B.
			9.585	31.28	W3XAU, Philadelphia, Pa. (Byberry)	20.260	14.79	WQQ, Rocky Point, N. Y., Exp.			UYYW, Winnipeg, Man.
			9.750	30.75	WOF, Lawrenceville, N. J., phone	21.054	14.24	WKA, Lawrenceville, N. J., phone			UZE, Victoria, B. C.
			9.870	30.38	WON, Lawrenceville, N. J., phone	21.060	14.24	KWN, Dixon, Calif., phone			UZF, Vancouver, B. C.
			9.900	30.01	KAZ, Manila, P. I., phone	21.220	14.13	WQA, Rocky Point, N. Y., Exp.			UZG, Prince Rupert, B. C.
			10.317	28.09	WNB, Lawrenceville, N. J., phone	21.240	14.12	WQJ, Rocky Point, N. Y., Exp.			UZH, Kamloops, B. C.
			10.370	28.91	WCG, Rocky Point, N. Y., Exp.						
			10.400	28.83	KEZ, Bolinas, Calif., Exp.						
			10.410	28.80	KES, Bolinas, Calif., Exp.						
			10.550	28.42	WOK, Lawrenceville, N. J., phone						
			10.610	28.25	WEA, Rocky Point, N. Y., Exp.						
			10.630	28.20	WED, Rocky Point, N. Y., Exp.						
			10.630	27.68	KIO, Kahuku, Hawaii, Exp.						
			10.830	25.67	W1XAL, Boston, Mass.						
			11.780	25.45	W2XE, New York, N. Y. (Wayne, N. J.)						
			11.823	25.36	W8XK, Pittsburg, Pa. (Saxonburg)						
			11.870	25.25	KKQ, Bolinas, Calif., Exp.						
			11.950	23.35	WOO, Ocean Gate, N. J., Ship phone						
			12.840	23.18	WAW, Hialeah, Fla., phone						
			12.930	22.74	KFY, Forward Base, Little America						
			13.185	22.74	KFZ, Main Base, Little America						
					KFY, Forward Base, Little America						
			13.200	22.71	KFY, Forward Base, Little America						
			13.245	22.64	KFY, Forward Base, Little America						
					KFZ, Main Base, Little America						
			13.260	22.61	KFY, Forward Base, Little America						
					KFZ, Main Base, Little America						
			13.390	22.39	WMA, Lawrenceville, N. J., phone						
			13.420	22.34	WHR, Rocky Point, N. Y., Exp.						
			13.435	22.31	WKD, Rocky Point, N. Y., Exp.						
			13.450	22.28	WEX, Rocky Point, N. Y., Exp.						
			13.465	22.26	WKC, Rocky Point, N. Y., Exp.						
			13.480	22.24	WAJ, Rocky Point, N. Y., Exp.						
			13.690	21.90	KKZ, Bolinas, Calif., Exp.						
			13.780	21.75	KKW, Bolinas, Calif., Exp.						
			13.840	21.66	WPE, Rocky Point, N. Y., Exp.						
			13.855	21.63	WQU, Rocky Point, N. Y., Exp.						
			13.870	21.61	WUY, Rocky Point, N. Y., Exp.						
			13.900	21.57	WQF, Rocky Point, N. Y., Exp.						
			13.915	21.54	WQS, Rocky Point, N. Y., Exp.						
			14.470	20.72	WME, Lawrenceville, N. J., phone						
			14.590	20.55	WMN, Lawrenceville, N. J., phone						
			14.800	20.26	WQV, Rocky Point, N. Y., Exp.						
			14.815	20.23	WQL, Rocky Point, N. Y., Exp.						

## POSTSCRIPTS from Our Readers

"I get radio magazines from all parts of the world but I can truly say that I have never seen one that can compare with RADEX in any respect. The information contained between its covers is exactly what a radio magazine should give to its readers."

S. H. Crowe, 157 Catharine St., N., Hamilton, Ont.

"Want to congratulate you on the November RADEX. It's the best magazine I have seen for any radio fan."

D. D. Campbell, Station KUOA, Fayetteville, Ark.

"I have been a reader of RADEX since 1930. I think it is one of the best of radio magazines. It is edited in a way that it can be easily understood by the non-technical radio fan such as myself."

Hubert H. Davis, 214 N. Green Street, Henderson, Ky.

"I am looking forward to the next issue and will certainly count the days till its arrival."

Robert M. Pybus, 4 Highfield Rd., Chorlton-cum-Hardy, Manchester, England.

"We have always considered your publica-

tion as filling one field of the radio industry and will cooperate with you to the best of our ability."

J. E. Roberts, Engineer in Charge, Station CRCS, Chicoutimi, Que.

"I have been a reader of your excellent radio magazine for the past three years and enjoy it very much. I know of no other that contains as much usable information."

Everett R. Clark, Box 313, Goodwell, Okla.

"I think RADEX is the best magazine on the market and I have a standing order for it at the newsstand. Why don't you issue, it at least twice a month or possibly oftener?"

Harold Gasper, RFD 7, St. Joseph, Mo.

"I have just discovered your valuable publication and, believe me, it fills a long-felt yearning on my part for a radio magazine that a layman is 'able to understand.'"

Charles Aloysius Steele, 3119 Seventh St., Port Arthur, Tex.

"As an old-timer who has subscribed to fourteen radio publications, I declare that your magazine is the one I would take if I were, somehow, restricted to only one."

Dr. Donald M. Gildersleeve, 2518 Webb Ave., Bronx, New York.



		UZI, Nelson, B. C.	4.942	62.70	CZA, Drummondville, P. Q., Ship phone
		UZN, Prince George, B. C.	6.005	49.93	VE9DR, Montreal, P. Q.
		UZN, Cranbrook, B. C.	6.015	49.85	VE9CX, Wolfville, N. S.
2.481	120.80	CGK, Ft. Chipewyan, Alta., Airway	6.030	49.72	VE9CA, Calgary, Alta.
		UYM, Ft. Rae, N. W. T., Airway	6.070	49.39	VE9CS, Vancouver, B. C.
		UYN, Ft. McMurray, Alta., Airway	6.090	49.23	VE9BJ, St. John, N. B.
		UYO, Echo Bay, N. W. T., Airway	6.092	49.22	VE9GW, Toronto, Ont. (Bowmanville)
2.735	109.62	VE9CI, London, Ont., Broadcast	6.110	49.07	VE9HX, Halifax, N. S.
3.068	97.70	CJU, Winnipeg, Man., Airway	6.150	48.75	VE9CL, Winnipeg, Man.
3.331	90.00	VE9AA, Montreal, P. Q., Exp.	6.335	47.35	VE9AF, Drummondville, P. Q., Exp.
3.450	86.90	CGK, Ft. Chipewyan, Alta., Airway	6.420	46.70	CFN, Grande Prairie, Alta., Police
		CJU, Winnipeg, Man., Airway			CFO, Lethbridge, Alta.
		UYM, Ft. Rae, N. W. T., Airway			CGJ, Peace River, Alta.
		UYN, Ft. McMurray, Alta., Airway			CGJ, Edmonton, Alta.
		UYO, Echo Bay, N. W. T., Airway			CGS, Calgary, Alta.
3.458	86.70	CFN, Grande Prairie, Alta., Police			CKT, Penticton, B. C.
		CFO, Lethbridge, Alta.			UZE, Victoria, B. C.
		CFU, Peace River, Alta.			UZF, Vancouver, B. C.
		CGJ, Edmonton, Alta.			UZG, Prince Rupert, B. C.
		CGS, Calgary, Alta.			UZH, Kamloops, B. C.
		CKT, Penticton, B. C.			UZI, Nelson, B. C.
		UZE, Victoria, B. C.			UZN, Prince George, B. C.
		UZF, Vancouver, B. C.			UZN, Cranbrook, B. C.
		UZG, Prince Rupert, B. C.	6.840	43.82	CFA, Drummondville, P. Q., phone
		UZH, Kamloops, B. C.	7.456	40.21	CKT, Penticton, B. C., Police
		UZI, Nelson, B. C.			UZE, Victoria, B. C.
		UZN, Prince George, B. C.			UZF, Vancouver, B. C.
		UZN, Cranbrook, B. C.			UZG, Prince Rupert, B. C.
4.751	63.10	CGK, Ft. Chipewyan, Alta., Airway			UZH, Kamloops, B. C.
		UYM, Ft. Rae, N. W. T., Airway			UZI, Nelson, B. C.
		UYN, Ft. McMurray, Alta., Airway			UZN, Prince George, B. C.
		UYO, Echo Bay, N. W. T., Airway			UZN, Cranbrook, B. C.
4.772	62.82	CFN, Grande Prairie, Alta., Police	8.353	35.89	CGK, Ft. Chipewyan, Alta., Airway
		CFO, Lethbridge, Alta.			UYM, Ft. Rae, N. W. T., Airway
		CFU, Peace River, Alta.			UYN, Ft. McMurray, Alta., Airway
		CGJ, Edmonton, Alta.			UYO, Echo Bay, N. W. T., Airway
		CGS, Calgary, Alta.	9.340	32.10	CGA, Drummondville, P. Q., phone
		CKT, Penticton, B. C.	11.720	25.58	VE9JR, Winnipeg, Man. (Middlechurch)
		UZE, Victoria, B. C.	12.951	23.15	CGK, Ft. Chipewyan, Alta., Airway
		UZF, Vancouver, B. C.			UYM, Ft. Rae, N. W. T., Airway
		UZG, Prince Rupert, B. C.			UYN, Ft. McMurray, Alta., Airway
		UZH, Kamloops, B. C.			UYO, Echo Bay, N. W. T., Airway
		UZI, Nelson, B. C.	13.296	22.55	CGA, Drummondville, P. Q., phone
		UZN, Prince George, B. C.	13.740	21.82	CGA, Drummondville, P. Q., phone
		UZN, Cranbrook, B. C.	17.330	17.30	CGS, Calgary, Alta., Police

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- ☐ Leatherette Cover..... .50

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## February DX Calendar

(Continued from second cover)

### FRIDAY MORNINGS

#### Feb. 2

2:30-4:00—CHWK, Chilliwick, 780 (1)

#### Feb. 23

4:00-5:00—KPOF, Denver, 880 (5)

#### Feb. 2-9-18-23

12:00-1:00—KOIL, Council Bluffs, 1260 (1)  
12:00-2:00—CFCN, Calgary, 1030 (10)  
12:00-6:00—WJAX, \*Jacksonville, 900 (1)  
1:00-1:30—WRAM, Wilmington, 1370 (1)  
1:00-2:00—WBBX, New Orleans, 1200 (1)  
\*Prizes to most distant listeners.

### SATURDAY MORNINGS

#### Feb. 3

4:00-5:00—WIS, Columbia, 1010 (5)  
4:15-4:45—WGNV, Chester, 1210 (1)

#### Feb. 3-17

2:00-3:00—XES, Tampico, 1020 (.5)

#### Feb. 10

2:30-4:00—10-BQ, Brantford, 1200 (.005)  
3:00-4:00—WJEJ, Hagerstown, 1210 (1)  
3:15-4:15—WMBQ, Brooklyn, 1500 (1)  
4:30-6:00—10-BP, Wingham, 1200 (.015)

#### Feb. 17-24

1:00-3:00—CMCW, Havana, 965 (15)  
2:00-3:00—WGLC, Hudson Falls, 1370 (1)

#### Feb. 17

2:00-3:00—WHA, Madison, 940 (1)  
2:00-3:00—WOQ, Kansas City, 1300 (1)  
3:00-9:00—KPPC, Pasadena, 1210 (.05)

#### Feb. 24

1:00-2:00—CMHJ, Cienfuegos, 1125 (.06)  
4:00-5:00—CFQC, Saskatoon, 1250 (5)

#### Feb. 3-10-17-24

1:00-2:00—WGNV, Chester, 1210 (1)  
2:00-3:00—CMBS, Havana, 785 (2)  
4:00-5:00—XEAO, Mexicali, 560 (1)

## THE MONTH'S CHANGES

### FREQUENCIES

595	CMW	Havana, Cuba, from 590	1100	CRCV	Vancouver, B. C., 500 to 1000
600	CGOR	Vancouver, B. C., from 1210	1120	CHGS	Summerside, P. E. I., 100 to 50
765	CMBS	Havana, Cuba, from 780	1120	CKOC	Hamilton, Ont., 1000 to 500
775	CMCQ	Havana, Cuba, from 780	1200	CJAT	Trail, B. C., 25 to 50
800	TIGP	San Jose, C. R., from 686	1200	10-BQ	Brantford, Ont., 5 to 15
835	CMC	Havana, Cuba, from 840	1210	CKBI	Prince Albert, Sask., 25 to 100
850	CMCF	Havana, Cuba, from 890	1210	CKMC	Cobalt, Ont., 100 to 50
875	CMX	Havana, Cuba, from 890	1210	CKOV	Kelowna, B. C., 100 to 50
910	CMJF	Camaguey, Cuba, from 930	1310	CHCK	Charlottetown, P. E. I., 100 to 50
915	CMCD	Havana, Cuba, from 925			
945.5	CMHD	Caibarien, Cuba, from 950	1290	.....	San Juan, P. R.
950	VOGY	St. John's, Nfld., from 1400	1310	CJKL	Kirkland Lake, Ont.
971.5	CMGF	Matanzas, Cuba, from 977	1310	CJLS	Yarmouth, N. S.
985	XEFE	Nuevo Laredo, Tams., from 1000	1370	CHPR	St. John, N. B.
1005	CMBZ	Havana, Cuba, from 1010	1390	CJRC	Middlechurch, Man.
1052	CMBG	Havana, Cuba, from 1070	1420	CKGB	Timmins, Ont.
1052	CMCB	Havana, Cuba, from 1070	1500	.....	Chelsea, Mass.
1120	CFTP	Edmonton, Alta., from 580	1500	.....	Hot Springs, Ark.
1170	CMJE	Camaguey, Cuba, from 1175			
1180	CMCJ	Havana, Cuba, from 1185	560	KTWO	Springfield, Mo., formerly KGIZ
1200	CJAT	Trail, B. C., from 1155	580	CFTP	Edmonton, Alta., formerly CHMA
1210	CKBI	Prince Albert, Sask., from 1200	1200	CJAT	Trail, B. C., formerly 10-AT
1370	WHET	Dothan, Ala., from 1210	1210	CKBI	Prince Albert, Sask., formerly 10-BI
1450	CFCT	Victoria, B. C., from 1430	1250	WNEW	Newark, N. J., formerly WAAM-WODA
1500	WKBB	E. Dubuque, Ill., from 1310			
1510	CFRC	Kingston, Ont., from 915			
1510	CKCR	Kitchener, Ont., from 645			

### POWER

540	CJRM	Moose Jaw, Sask., 500 to 1000
580	WOBV	Charleston, W. Va., 500 to 750
580	WTAG	Worcester, Mass., 500 to 750
800	CFCO	Chatham, Ont., 100 to 50
890	CJGJ	Calgary, Alta., 500 to 100
730	CJCA	Edmonton, Alta., 500 to 1000
780	CKPR	Fort William, Ont., 100 to 50
930	CFAC	Calgary, Alta., 500 to 100

### PERMIT TO CHANGE LOCATION

1370	WMBR	Tampa, Fla., to Jacksonville, Fla.
1420	WENC	Americus, Ga., to Albany, Ga.

### REINSTATED

630	XEZ	Merida, Yuc.
1200	CHAB	Moose Jaw, Sask.

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